POSTS

DEPENDABLE DRAWING MATERIALS

THE FREDERICK POST COMPANY
OF OREGON
87 Fifth Street
PORTLAND, ORE.

J G A Sayman

16TH EDITION

POSTS

Catalog of

DEPENDABLE DRAWING MATERIALS EQUIPMENT AND SUPPLIES ENGINEERING INSTRUMENTS AND BLUE PRINT PAPERS

for

Draftsmen, Architects
Engineers and Technical
Schools

◆

THE FREDERICK POST CO.
Manufacturers and Importers

ADDRESS ALL CORRESPONDENCE TO

P. O. BOX 803
CHICAGO

CITY SALESROOMS
316-318
SOUTH WABASH AVENUE

GENERAL OFFICE
AND FACTORIES
3635 N. HAMLIN AVENUE

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1930
THE FREDERICK POST COMPANY
CHICAGO, ILL.

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PREFACE

WE TAKE great pleasure in presenting this, the sixteenth edition of our catalog to our patrons, and hope that it will be accorded a reception equally as kind as our former editions. At the same time, we take occasion to express our thanks for the kind patronage our friends have given us, and, as heretofore, it shall be our aim in the future to retain the interest of those who have helped us to increase our business, and to add to our long list of satisfied patrons, by not only maintaining the same standard of dependability which our goods have enjoyed heretofore, but also by unceasing endeavor to improve their quality wherever this is possible.

Our motto mentioned in the preface to the last edition of our catalog, that a pleased customer is the best advertisement, combined with our policy of absolute fairness and square and honest dealing, to which we always strictly adhere, has brought us success in so large a measure that our quarters were not large enough for our requirements and we are now building an addition to our factory at Hamlin and Avondale Avenues, as large again as the main building.

Our policy of constant progress has made it necessary to make a number of important changes in this last edition of our catalog; new goods have been added and others, which have become obsolete, have been replaced with new and more up-to-date articles.

We believe that we have attained what we have set out to do, when making up this publication, that is, to list every article essential to our line, to give our friends a large variety of all the standard goods to select from, while at the same time we refrained from listing any articles which would simply tend to increase the bulk of our book without adding to its usefulness.

We can truthfully claim that all our goods are described accurately and we guarantee them to be so. We state this for the information of those who, as yet, are not acquainted with us and respectfully ask their critical inspection of our line when they are in the market.

It has been our aim to list only goods of first-class workmanship and material, rather than low-priced articles, but we have made our prices as low as compatible with high quality, and we express the hope that by adhering to our policy of giving prompt attention to the wants of our patrons and by carefully executing their orders, we shall maintain their friendship and patronage as before.

THE FREDERICK POST CO.

JANUARY, 1930.

NOTICE

A close observation of the following directions will lessen the chances of mistakes being made in the filling of orders and avoid delay in making shipments promptly.

1st. Always give **catalog number** and name of each article, and on certain items, such as papers, state size, and on Sensitized papers, printing speed.

2d. SHIPPING DIRECTIONS. State how you wish goods shipped, whether by express, parcel post or freight; if by freight, mention name of route preferred. Packages weighing 60 lbs. or less may be sent by express more advantageously and in most cases just as cheaply as by freight.

EXPRESS shipments are forwarded "charges collect," unless advised to prepay, in which case the charges are added to the invoice.

PARCEL POST shipments valued at $5.00 or over are sent insured, and fee and postage are added to the invoice. If parcel happens to arrive in a damaged condition, it should be accepted under protest and claim filed with the Postmaster. We advise that all orders for parcel post shipment be marked "Send P. P. **Insured.**"

FREIGHT shipments, when necessary, are packed in wooden cases.

When no shipping directions are given, we forward goods according to our best judgment.

All shipments are made at the purchaser's risk; our responsibility ceases when same is accepted by the EXPRESS CO., RAILROAD or POST OFFICE, and all claims for damages or goods lost in transit must be made to the transportation company; we will, however, render all assistance possible in locating lost shipments and collecting damages.

REMITTANCES. Remittances may be made by **bank draft** payable to our order, **post office money order** or **express money order.** If cash is forwarded by mail, the letter should be registered. When goods are ordered by express, C. O. D., the order must be accompanied by a remittance sufficient to cover packing and express charges both ways; express charges for collection will be added to the invoice. It is far more satisfactory and less expensive to **send remittance in full with the order.**

ACCOUNTS. We welcome responsible parties to open an account with us. Such requests should be accompanied with references. It will expedite delivery on initial orders where concerns have no commercial rating, to forward remittance with the order, otherwise delays will occur owing to our being obliged to make inquiry regarding the responsibility of the party ordering.

GUARANTEE. We guarantee the merchandise listed in this catalog to be exactly as represented, and if any article is not satisfactory, it may be returned for exchange or your money will be refunded.

All Prices Are Subject to Change Without Notice!

DRAWING PAPER IN SHEETS

Our own brands of the papers listed in this catalog are the result of many years' experience in this business. We developed these fine papers through careful study as to the requirements of the trade, spending a great deal of time and money endeavoring to produce a superior article. Our brands are made expressly for us, according to our own specifications, by mills of known reputation. We offer these papers to you with the assurance that they will give absolute satisfaction, when used for the purpose which the brief description given below, states they are particularly suited.

No. 1 **BOND PAPER.** A very tough tracing or sketching paper, suitable for work requiring considerable handling.

	Size	Per Quire	Per Ream
Demy	16x21 inches..........		
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Double Elephant	27x40 inches..........		

No. 3. **MECHANO.** Finest White Drawing Paper. This is an extra fine drawing paper, with cold-pressed surface. A very good substitute for "Whatman's" papers, at a considerable saving in cost.

	Size	Per Quire	Per Ream
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Special	24x36 inches..........		
Double Elephant	27x40 inches..........		

No. 4M. **POST'S LINCOLN** Superior Detail Drawing Paper. Medium. Buff Color.

	Size	Per Quire	Per Ream
Demy	15x22 inches..........		
Royal	18x24 inches..........		
Imperial	22x30 inches..........		
Special	24x36 inches..........		

No. 4H. **POST'S LINCOLN** Superior Detail Drawing Paper. Extra thick. Buff Color.

	Size	Per Quire	Per Ream
Demy	15x22 inches..........		
Royal	18x24 inches..........		
Imperial	22x30 inches..........		
Special	24x36 inches..........		

No. 5. **CLASSIC DRAWING PAPER.** An excellent, white drawing paper, especially good for school use; has slightly grained surface; will take pencil, crayon, water color and ink.

	Size	Per Quire	Per Ream
Cap	14x17 inches..........		
Demy	16x21 inches..........		
Medium	17x22 inches..........		
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Special	24x36 inches..........		
Double Elephant	27x40 inches..........		

DRAWING PAPER IN SHEETS

No. 5A. **SCHOOL DRAWING PAPER.** Made especially for use in schools where an inexpensive but good white drawing paper is desired. Supplied only in the following sizes:

	Size	Per Quire	Per Ream
Packet	6x 9 inches..........		
Letter	9x12 inches..........		
Cap	12x18 inches..........		
Royal	18x24 inches..........		
Special	24x36 inches..........		

No. 6G. **NORWOOD EXTRA FINE WHITE DRAWING PAPER.** A hard, smooth-finished paper of the highest grade. Uniform in finish and texture. Gives perfect satisfaction when used for pen and ink, pencil or brush work. Exceedingly strong; will erase perfectly. A perfect drawing paper for the most exacting user. Will not discolor or get brittle with age.

	Size	Per Quire	Per Ream
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Double Elephant	27x40 inches..........		

No. 7. **CORONA CREAM DRAWING PAPER.** Finest grade of buff drawing paper made. Particularly well adapted for preliminary work. Has a hard-grained surface, which stands erasing perfectly, takes ink, pencil or water color and folds without breaking. Will stand considerable handling without soiling.

	Size	Per Quire	Per Ream
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Special	24x36 inches..........		
Double Elephant	27x40 inches..........		

No. 7½. **POSTEX DRAWING PAPER.** Especially suitable for machine shop or any work requiring much handling. Has a cold-pressed surface which erases well and permits rough usage. The color is restful to the eye.

	Size	Per Quire	Per Ream
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Special	24x36 inches..........		
Double Elephant	27x40 inches..........		

No. 7½H. **BUFF DRAWING PAPER.** Thick.

	Size	Per Quire	Per Ream
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Double Elephant	27x40 inches..........		

No. 8. **VERDEX GREEN DRAWING PAPER.** The light green tint relieves eyestrain. A drawing paper of exceptional strength and splendid drawing qualities.

	Size	Per Quire	Per Ream
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Special	24x36 inches..........		
Double Elephant	27x40 inches..........		

DRAWING PAPER IN SHEETS

The quality of "WHATMAN'S" DRAWING PAPER is so well known that further description is unnecessary. This paper is made with three different styles of surfaces. H. P. meaning "hot-pressed," very smooth; generally used for pen and ink or fine-line drawings. C. P. meaning "cold-pressed," grained surface; general drawing and water color work. R. meaning "rough," very coarse-grained surface for water colors. Be sure to give both style and size when ordering.

No. 9. **"WHATMAN'S" HAND-MADE DRAWING PAPER** with H. P. or C. P. surfaces.

	Size	Per Quire	Per Ream
Cap	13x17 inches..........		
Demy	15x20 inches..........		
Medium	17x22 inches..........		
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Double Elephant	27x40 inches..........		
Antiquarian	31x53 inches..........		

No. 10. **"WHATMAN'S" HAND-MADE DRAWING PAPER,** R.

	Size	Per Quire	Per Ream
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Double Elephant	27x40 inches..........		

No. 11. **"WHATMAN'S" HAND-MADE DRAWING PAPER,** extra heavy, H. P. or C. P.

	Size	Per Quire	Per Ream
Imperial	22x30 inches..........		
Double Elephant	27x40 inches..........		

No. 12. **POST'S HAND-MADE DRAWING PAPER.** This drawing paper has been manufactured continuously in the same factory since the year 1584. Its superior standard of excellence has been recognized by the world's most famous artists for more than 340 years. It is the finest of hand-made papers and unexcelled for general drawings and water color painting. The cost is much less than for other hand-made papers of similar quality. It is made with three different styles of surfaces.

H. P.—"hot-pressed" or smooth, for ink and fine-line drawings.
C. P.—"cold-pressed" or grained surface for general drawing and water color work.
R.—"rough," very coarse surface for water colors.
Indicate size and surface on your orders.

	Size	Per Quire	Per Ream
Demy	15x20 inches..........		
Royal	19x24 inches..........		
Imperial	22x30 inches..........		
Double Elephant	27x40 inches..........		

DRAWING PAPER IN SHEETS—Cont.

"STRATHMORE" PATENT OFFICE BRISTOL BOARD. Possesses all the requirements of the U. S. Patent Office. For pen and ink work; stands erasing perfectly. Can be rolled without injury.

		Per Dozen	Per Gross
No. 13A.	10x15, plain, 2-ply..........		
13B.	10x15, plain, 3-ply..........		
13C.	10x15, printed, 2-ply..........		
13D.	10x15, printed, 3-ply..........		

"REYNOLD'S" PATENT OFFICE BRISTOL BOARD. Excellent blue print copies can be made of drawings on Reynold's Patent Office Bristol. U. S. standard size and form.

		Per Dozen	Per Gross
No. 13E.	10x15, plain, 2-ply..........		
13F.	10x15, plain 3-ply..........		
13G.	10x15, printed, 2-ply..........		
13H.	10x15, printed, 3-ply..........		

POST'S BRISTOL BOARD. The best Bristol Board on the market; hard surface, standing erasing and scratching to perfection. Used by illustrators for finest penwork.

		Per Dozen	Per 100
No. 14.	22x28-inch sheets, 2-ply..........		
15.	22x28-inch sheets, 3-ply..........		

No. 16. "REYNOLD'S" BRISTOL BOARD.

		2 Ply Doz.	2 Ply Gross	3 Ply Doz.	3 Ply Gross	4 Ply Doz.	4 Ply Gross
Cap	12½x15¼						
Demy	14⅝x18¼						
Medium	16½x20¾						
Royal	18¼x22⅜						
Imperial	21½x28¾						

In ordering Bristol Boards it is requested that specific information be given as to the catalog number, the size, number of ply required and whether printed or plain.

For your convenience in ordering, these Boards are carried in the following size packages:

Patent Office Bristol Boards are banded in dozen lots and carried in half and one-gross packages.

No. 17 to 20A in packages of fifty sheets.

No. 21 to 24 packed ten sheets to a package.

POST'S DEPENDABLE DRAWING PAPER
Made Specially for Us

Are Uniform in Texture, Have Fine Erasing Qualities
Will Not Discolor with Age
The Choice of Discriminating Draftsmen

Printing Frames for Patent Office Drawings Listed on Page 40.

WATER COLOR, CRAYON PAPERS, BOARDS, MOUNTING BOARDS, ETC.

STRATHMORE DRAWING BOARDS. For pen and ink sketching, water color work, also pencil. Has excellent erasing qualities. Supplied in two sizes in either 2, 3, 4 or 5-sheet boards, as listed below. Order by number and be sure to give size wanted.

Size	Per 10 Sheets	Per 100 Sheets
14½x23 inches..............		
23 x29 inches..............		

No. 17. **STRATHMORE** 2-Sheet Drawing Board. Medium surface.

17A. **STRATHMORE** 2-Sheet Drawing Board. High surface.

18. **STRATHMORE** 3-Sheet Drawing Board. Medium surface.

18A. **STRATHMORE** 3-Sheet Drawing Board. High surface.

19. **STRATHMORE** 4-Sheet Drawing Board. Medium surface.

19A. **STRATHMORE** 4-Sheet Drawing Board. High surface.

20. **STRATHMORE** 5-Sheet Drawing Board. Medium surface.

20A. **STRATHMORE,** 5-Sheet Drawing Board. High surface.

STRATHMORE ILLUSTRATION BOARD

No.		Size	Per Sheet	Per 100
21.	Light,	22 x30 inches..........		
22.	Heavy,	20 x30 inches..........		
		22½x28½ inches..........		
		30 x40 inches..........		

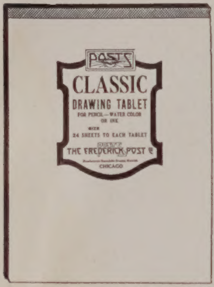
No. 24. **POST'S ILLUSTRATION BOARD.**

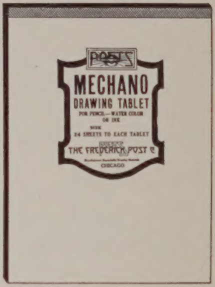
Size	Per Sheet	Per 100
20x30 inches.....................		
30x40 inches.....................		

No. 25. **STRATHMORE "CHARCOAL PAPER."** White.

	Per Quire	Per Ream
Royal, 19x25 inches...............		

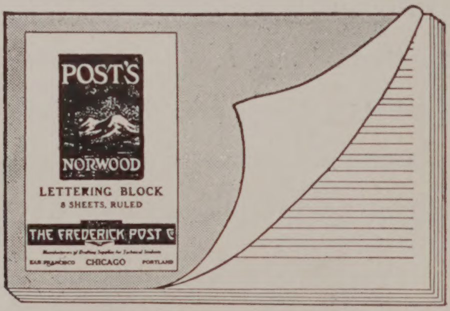
SCHOOL DRAWING TABLETS


POST'S
CLASSIC
DRAWING TABLET
24 SHEETS TO EACH TABLET
THE FREDERICK POST Co.
CHICAGO


POST'S
MECHANO
DRAWING TABLET
24 SHEETS TO EACH TABLET
THE FREDERICK POST Co.
CHICAGO

No. 26. **CLASSIC** Made of Classic Drawing Paper, 9x12 inches, 16 sheets. Each, Dozen,

No. 27. **MECHANO** Made of Mechano Drawing Paper, 9x12 inches, 16 sheets . . . . .Each, Dozen,


POST'S
NORWOOD
LETTERING BLOCK
8 SHEETS, RULED
THE FREDERICK POST Co.
CHICAGO

NORWOOD LETTERING BLOCKS AND SHEETS

No. 28A. **NORWOOD LETTERING BLOCK.** Made of Norwood Drawing Paper, 5x6¾ inches, engraving 4⅛x6 inches, 5 sheets, cardboard back . . . . .Each, Dozen,

No. 28B. Same as above, but 8 sheets. . . . . .Each, Dozen,

No. 28½. **NORWOOD LETTERING SHEETS.** Made of Norwood Drawing Paper, 10x13½ inches, engraving 8¼x11⅛ inches. . .Dozen,

Norwood Lettering Blocks and Sheets are extensively used by students in practice work for freehand lettering.

No. 29. **POST'S SKETCH BLOCKS.** 28 sheets of superior quality white drawing paper, following sizes: 5x7, 6x9, 7x10, 9x12, 10x14, 12x18, 14x20 . . . . .Dozen,

DETAIL PAPERS IN ROLLS

Can be supplied in original rolls weighing about 100 pounds. They are also put up in 10 and 50-yard rolls and come in various widths and thicknesses. Be sure to specify WIDTH, THICKNESS and SIZE ROLL wanted.

No. 30. **MANILA DETAIL** Paper. Smooth surface. Used by ornamental glass workers, pattern makers, etc., for stencils, etc.
In original rolls weighing about 100 pounds.....Per pound,
36 inches wide..........
40 inches wide..........
48 inches wide..........

No. 32L. **POST'S LINCOLN** Superior Manila Detail Drawing Paper. Thin. Slightly grained surface. Manufactured of selected rag stock. Takes ink and pencil well and erases to perfection. Never gets brittle, lies perfectly flat on drawing table, and will stand the roughest handling.
In rolls 100 pounds, 36, 42 inches wide.........Per pound,
10-Yd. Roll 50-Yd. Roll
36 inches wide..........
42 inches wide..........

No. 32M. **POST'S LINCOLN** Superior Detail Drawing Paper. Medium.
In rolls 100 pounds, 36, 42, 48, 54 inches wide...Per pound,
10-Yd. Roll 50-Yd. Roll
36 inches wide..........
42 inches wide..........
48 inches wide..........
54 inches wide..........
Can furnish in sheets, sizes 15x22, 18x24, 22x30 and 24x36.
See No. 4M in Price List.

No. 32H. **POST'S LINCOLN** Superior Detail Drawing Paper. Extra thick.
In rolls 100 pounds, 36, 42, 48, 54 inches wide...Per pound,
10-Yd. Roll 50-Yd. Roll
36 inches wide..........
42 inches wide..........
48 inches wide..........
54 inches wide..........
Can furnish in sheets, sizes 15x22, 18x24, 22x30 and 24x36.
See No. 4H in Price List.

POST'S WHITE DETAIL PAPER.
No. 35. Thin. No. 36. Medium. No. 37 Heavy.
10-Yd. Roll 50-Yd. Roll
30 inches wide..........
36 inches wide..........
42 inches wide..........
54 inches wide..........

Sample Book of Drawing and Tracing Papers on Request.

Our Roll Drawing Paper Cut Into Any Size Sheet Desired.

DRAWING PAPERS IN ROLLS

We take great pride in submitting the following list of HIGH CLASS DRAWING PAPERS for your consideration. These, like the Drawing Papers in Sheets listed on pages 7 and 8, are of the highest quality and are manufactured exclusively for us. Each paper has some special characteristic, commending it for a particular use and is guaranteed by us to be exactly as represented. A careful inspection of each mill run insures a constant uniformity of the surface and thickness of our papers.

A perfect drawing paper must ERASE PERFECTLY, TAKE INK and COLOR well, LIE FLAT and stand ROUGH USAGE—these requirements have been met in the POST DRAWING PAPERS. We will be pleased to submit samples for your consideration.

No. 40. **CORONA DRAWING PAPER.** Finest cream drawing paper, has a superior hard-grained surface. Takes ink and water color and erases perfectly. Will stand much handling without soiling and folds without breaking.

In rolls of about 50 lbs........................Per pound,

	10 Yd.	50 Yd.	Rolls
30 inches wide..........			
36 inches wide..........			
42 inches wide..........			
54 inches wide..........			
72 inches wide..........			

No. 40½. **VERDEX GREEN DRAWING PAPER.** Finest green paper of exceptional strength and splendid drawing qualities. Light green tint, restful to the eyes. In rolls of about 50 lbs. Per pound,

	10 Yd.	50 Yd.	Rolls
30 inches wide..........			
36 inches wide..........			
42 inches wide..........			

No. 41. **POSTEX DRAWING PAPER.** Finest BUFF drawing paper, An unequaled combination of strength and erasing qualities. The tint relieves eyestrain and also permits considerable handling without soiling. In rolls of about 50 lbs...............Per pound,

	10 Yd.	50 Yd.	Rolls
30 inches wide..........			
36 inches wide..........			
42 inches wide..........			

No. 42. **BUFF DRAWING PAPER.** Medium. A light BUFF drawing paper with a hard-grained surface. A splendid low-priced paper. Sold only in original rolls of about 50 pounds each. Per pound,

36 inches wide..........
42 inches wide..........

Our Roll Drawing Papers Cut Into Any Size Sheets Desired.

Sample Book of Drawing and Tracing Papers on Request.

DRAWING PAPERS IN ROLLS

No. 45. **MECHANO DRAWING PAPER — FINEST WHITE.** A very superior white paper suitable for wash drawings. Takes ink or pencil equally well. Slightly grained, cold-pressed surface. In rolls of about 50 lbs.........................Per pound,

	10 Yd.	50 Yd. Rolls
30 inches wide..........		
36 inches wide..........		
42 inches wide..........		

No. 46. **CLASSIC WHITE DRAWING PAPER.** A moderate-priced white paper adapted for preliminary drawings; has slightly grained surface; will take pencil, crayon, water color and ink. In rolls of about 50 lbs...............................Per pound,

	10 Yd.	50 Yd. Rolls
30 inches wide..........		
36 inches wide..........		
42 inches wide..........		

No. 50. **JUMBO DRAWING PAPER.** Thin. Strongest drawing paper made. Smooth surface with a very slight grain. Excellent for **map work.** In rolls of about 50 lbs.............Per pound,

	10 Yd. Rolls
36 inches wide................................	
42 inches wide................................	
62 inches wide................................	

No. 51. **JUMBO DRAWING PAPER.** Thick. A drawing paper of great strength, suitable for the highest class of mechanical drawings. Has a hard, pure white surface. It is the best drawing paper for **map work** and other fine-line drawings, in either ink or pencil. Will also take water colors. In rolls of about 50 lbs. Per pound,

	10 Yd. Rolls
36 inches wide................................	
42 inches wide................................	
62 inches wide................................	

No. 54. **PRIMO EGGSHELL DRAWING PAPER.** Medium. An extra fine all-linen stock drawing paper with a fine-pebbled surface. A perfect paper for perspectives, water colors and finished drawings. In rolls of about 50 lbs........................Per pound,

	10 Yds.
36 inches wide................................	
42 inches wide................................	
58 inches wide................................	

Our Roll Drawing Papers Cut Into Any Size Sheets Desired.

Sample book of Drawing and Tracing Papers on request.

MOUNTED DRAWING PAPERS IN SHEETS

Our mounted papers are stretched and air-dried.

Besides the sizes listed below, we furnish any size sheets of our various papers, mounted to order, and mount maps in any style desired.

All mounted sheets furnished with muslin carefully trimmed to edges.

No. 70. **WHATMAN'S** Mounted. (Specify H. or C. P.)
19x24 inches . . . . .Per sheet,
22x30 inches . . . .
27x40 inches . . . .

No. 71. **WHATMAN'S** Double Mounted for atlas work (paper on both sides of muslin).
22x30 inches . . . . .Per sheet,
27x40 inches . . . .

MOUNTED DRAWING PAPERS IN ROLLS

These papers are mounted on heavy muslin and are especially adapted for **map work** or other drawings it is desired to preserve.

Our Mounted papers will not break if folded or handled and are **mounted perfectly smooth.**

No. 79. **CORONA** Mounted. For description see No. 40.
36 inches wide. . . . . .Per yard, Per 10 yards,
42 inches wide. . . . .
54 inches wide. . . . .
72 inches wide. . . . .

No. 80. **POSTEX** Mounted. For description see No. 41.
30 inches wide. . . . . .Per yard, Per 10 Yards,
36 inches wide. . . . .
42 inches wide. . . . .

No. 81. **MECHANO** Mounted. For description see No. 45.
30 inches wide. . . . . .Per yard, Per 10 Yards,
36 inches wide. . . . .
42 inches wide. . . . .

No. 85. **JUMBO** Mounted. For description see No. 51.
36 inches wide. . . . . .Per yard, Per 10 yards,
42 inches wide. . . . .
62 inches wide. . . . .

No. 90. **PRIMO** EGGSHELL MOUNTED. For description see No. 54.
36 inches wide. . . . . .Per yard, Per 10 yards,
42 inches wide. . . . .
58 inches wide. . . . .

MAP MOUNTING DEPARTMENT

In our Map Mounting Department, we are equipped to handle mounting of maps, photostats and topographical sheets in every form. We make a specialty of preparing sheets for block book work, both in single and double mounted form.

For this work our Mounted Papers No. 85 and 90 are invaluable when mounted with hinge and punched to fit special binders and holders.

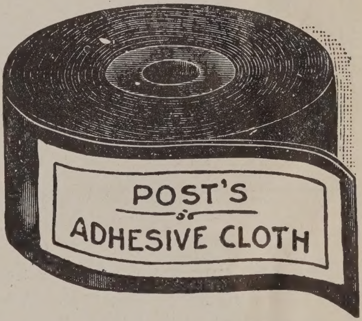
ADHESIVE CLOTH AND PAPERS

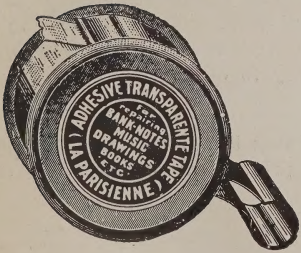
No. 117. **POST'S GUMMED CLOTH.**

In lengths of 10 yards, ⅞ inches wide . . . Per roll,

Made in white and black.

The strongest cloth tape for patching drawings or mending blue prints and binding drawings or tracings.


POST'S
ADHESIVE CLOTH

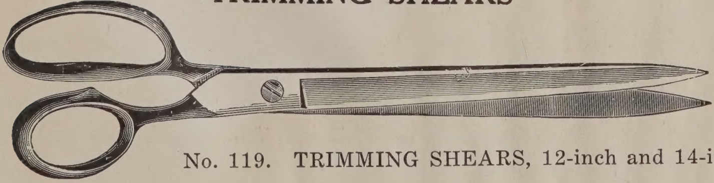

ADHESIVE TRANSPARENTE TAPE
(LA PARISIENNE)
For repairing
BANK-NOTES
MUSIC
DRAWINGS
BOOKS
ETC.

No. 118. **FRENCH TRANSPARENT GUMMED PAPER**

On reels containing 6 yards, each
Per dozen . . . .

This paper will not blur or blot when written over and is perfectly transparent; very useful for repairing drawings or blue prints.

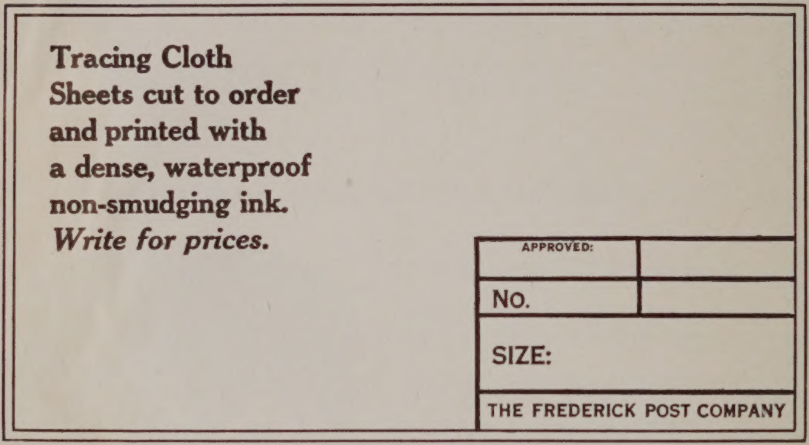
TRIMMING SHEARS



No. 119. TRIMMING SHEARS, 12-inch and 14-inch

TRACING CLOTHS AND PAPERS IN SHEETS

Printed with borders, titles, etc.



Tracing Cloth
Sheets cut to order
and printed with
a dense, waterproof
non-smudging ink.
Write for prices.

APPROVED:	
NO.	
SIZE:	
THE FREDERICK POST COMPANY	

We are supplying a great many of our customers with our TRACING CLOTHS and PAPERS, printed with BORDERS and TITLES similar to the above, and cut into sheets. This requires a special non-smudging, opaque ink to give the proper density and permanency. We have the best facilities for executing such orders and request an opportunity to quote prices and submit samples.

Any of our TRACING CLOTHS or PAPERS listed in this catalog can be supplied in sheets, either without printing or printed, according to form desired.

For Tracing Cloths see Nos. 121, 123, 125, 127.

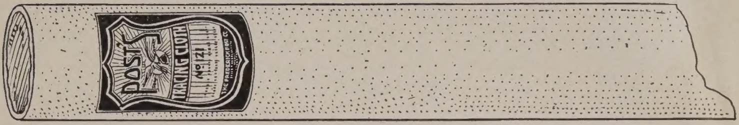
For Tracing Papers see Nos. 140 to 178.

FEDERAL AID SHEETS

The special forms recommended by the government for highway and railroad projects can be obtained from us. These forms illustrated and described on pages 54 and 55.

Write to us for information on Railroad Valuation forms and other special forms.

TRACING CLOTHS—Cont.



No. 121. **POST'S TRACING CLOTH.** A high-grade tracing cloth, made to meet the requirements of the most exacting user. It is uniform in texture, exceptionally transparent, and free from pin holes. A tracing cloth of the best quality at a moderate price.

In rolls of 24 yards.

	Per Yard	Per Roll
30 inches wide		
36 inches wide		
42 inches wide		

No. 125. **IMPERIAL TRACING CLOTH,** in rolls of 24 yards.

	Per Yard	Per Roll
24 inches wide		
30 inches wide		
36 inches wide		
42 inches wide		
48 inches wide		
54 inches wide		

No. 126. **BLUE PENCIL CLOTH.** This cloth has a surface especially prepared for pencil work. It is transparent and good blue prints can be obtained from pencil tracings made on this cloth.

In rolls of 24 yards.

	Per Yard	Per Roll
30 inches wide		
36 inches wide		
42 inches wide		

No. 127. **WHITE PENCIL CLOTH.** This cloth has a surface especially prepared for pencil work. It is fairly transparent and good blue prints can be obtained from pencil tracings made on this cloth.

In rolls of 24 yards.

	Per Yard	Per Roll
30 inches wide		
36 inches wide		
42 inches wide		

Sample Book of Tracing Papers and Cloths on Request.

TRACING CLOTH PREPARATIONS

POST'S
TRACING
CLOTH
POWDER
THE FREDERICK POST Co.
MANUFACTURERS
DRAWING MATERIALS
MATHEMATICAL INSTRUMENTS
DRAFTING ROOM EQUIPMENT
CHICAGO
LOS ANGELES
SAN FRANCISCO

No. 131

No. 131. **POST'S TRACING CLOTH POWDER.** For preparing Tracing Cloth so it will take ink readily—in perforated tin shakers.

Each . . . .
Dozen . . . .

No. 132. **POST'S TRACING CLOTH POWDER — CAKE FORM.**

Each . . . .
Dozen . . . .

No. 133. **PRIMO LIQUID TRACING CLOTH CLEANER.** To remove pencil marks, grease spots, or dirt, moisten the piece of flannel furnished with each bottle and rub the tracing cloth with it. The LIQUID **will not** remove waterproof ink. The tracing cloth will take ink readily after its application.

Each . . . .
Dozen . . . .

No. 134. **PRIMO INK REMOVER.** For erasing Black Waterproof Drawing Ink lines and figures without injury to the tracing cloth.

Each Dozen

No. 134. 1-oz. Bottles. . . .
No. 134A. 4-oz. Bottles. . . .

"PRIMO"
INK
REMOVER
For removing Black Waterproof Drawing Ink from Tracing Cloth

No. 134

No. 135. **PRIMO TRANSPARENTIZING FLUID.** This solution, when applied to old tracings, will restore their transparency. Drawings on board, drawing paper, cloth, Sepia-Solar Negatives, etc., when transparentized with this FLUID can be printed very much faster and clearer. Non-inflammable, will not injure pencil or ink drawings and is odorless.

No. 135. Primo Trans. Fluid, per gal. . . . .
No. 135A. Primo Trans. Fluid, per ½ gal. . . . .
No. 135B. Primo Trans. Fluid, per quart . . . .
No. 135C. Primo Trans. Fluid, per pint . . . .
No. 135D. Primo Trans. Fluid, per ½ pint. . . . . . .

THE F. POST CO. CHICAGO
No
135
PRIMO
TRANSPARENTIZING
FLUID
DIRECTIONS
THE FREDERICK POST CO.
SAN FRANCISCO CHICAGO LOS ANGELES

No. 135-B

TRACING AND SKETCHING PAPER IN ROLLS

No. 140. **POST BOND TRACING PAPER.** Thin, clear white with medium smooth surface, especially adapted for both ink and pencil work, of 100% linen rag quality and very strong. The ideal paper where much handling is involved. Transparency for Tracing and Blue Printing very good.
36 inches wide ....Per roll of 20 yards, 50 yards,
42 inches wide ....

No. 141. **JOHANNOT TRACING PAPER.** Thin. A white tracing paper, very transparent. Good blue prints can be obtained from drawings on this paper.
36 inches wide..........Per roll 20 yards, 50 yards,
42 inches wide..........

No. 142. **JOHANNOT TRACING PAPER.** Medium. Like No. 141 but heavier weight.
36 inches wide..........Per roll 20 yards, 50 yards,
42 inches wide..........

No. 143. **MONITOR TRACING and SKETCHING PAPER.** Thin. Will take ink and color perfectly. Blue prints can be taken from drawings made on this paper.
36 inches wide..........Per roll 20 yards, 50 yards,
42 inches wide..........

No. 144. **MERRIMAC TRACING and SKETCHING PAPER.** Same paper as No. 63, but heavier.
36 inches wide..........Per roll 20 yards, 50 yards,
42 inches wide..........

No. 145. **AVONDALE TRACING PAPER.** Thin. Glazed. Very transparent.
42 inches wide........................Per roll of 20 yards,

No. 148. **VICTORIA** Tracing Paper. Thin. Very transparent.
42 inches wide....Per roll 20 yards, 50 yards, 100 yards,

No. 161. **DETAIL** Tracing Paper. White. For tracing full-sized details. Adapted to pencil only.
42 inches wide...........Per roll 50 yards, 100 yards,
48 inches wide...........

No. 162. **LEGAL BOND.** Medium thick. A fine quality of linen stock, fairly transparent, glazed surface of great strength. Blue prints can be made from drawings on this paper.
36 inches wide....................Per roll of 20 yards,
42 inches wide....................

No. 162B. **LEGAL BOND.** Like No. 162 but has an unglazed surface. Adapted to either ink or pencil.
36 inches wide....................Per roll of 20 yards,
42 inches wide....................

No. 163. **UNION** Tracing Paper. Unglazed. Strongest tracing paper made. Will not tear in handling and retains its white color. Will not get brittle with age.
36 inches wide....................Per roll of 20 yards,
42 inches wide....................

Write for Sample Book of Drawing and Tracing Papers.

Our Roll Tracing Papers Cut Into Any Size Sheet Desired.

TRACING AND SKETCHING PAPER IN ROLLS—Cont.

No. 166. **IVORY** Tracing Paper. Thin. Very transparent, smooth finish.

36 inches wide.....................Per roll of 20 yards,
42 inches wide.....................

No. 167. **IVORY** Tracing Paper. Medium. Same paper as described under No. 166 but heavier.

36 inches wide.....................Per roll of 20 yards,
42 inches wide.....................

No. 168. **ALBION** Tracing Paper. Unglazed. A thin, white, natural tracing paper, adapted to pen and ink perspectives.

42 inches wide..........Per roll of 20 yards, 50 yards,
57 inches wide..........

No. 169. **ATLAST** Tracing Paper. Very strong and transparent. Will not become brittle.

42 inches wide..........Per roll of 20 yards, 50 yards,

No. 171. **NATURAL** Tracing Paper. A strong, thin, white tracing paper of exceptional strength. The surface has a very fine tooth and takes ink and pencil very well.

42 inches wide..........Per roll of 20 yards, 50 yards,
57 inches wide..........

No. 172. **IRVING** Tracing Paper. A very transparent paper, takes ink perfectly and is especially adapted for use in tracing from blue prints.

42 inches wide.....................Per roll of 20 yards,

No. 173. **PARCHMENT** Tracing Paper. Medium. Very strong and transparent. Will not shrink and takes ink and water color well.

40 inches wide.....................Per roll of 20 yards,

No. 174. **PARCHMENT** Tracing Paper. Thick. Same paper as described under No. 173 but **heavier.**

40 inches wide.....................Per roll of 20 yards,

Write for Sample Book of Drawing and Tracing Papers.

TRACING AND SKETCHING PAPER IN ROLLS—Cont.

No. 175. **IMPERIAL** Tracing Paper. A good substitute for tracing cloth. Excellent for ink work. Very tough and transparent. The only air-dried tracing paper made. Surpasses all others in durability. An excellent paper for making tracings which are to be preserved, as it will not deteriorate with age.

36 inches wide....................Per roll of 20 yards,
42 inches wide....................

No. 175H. **IMPERIAL** Tracing Paper. Heavier than No. 175. Excellent substitute for tracing cloth. A dull-finish tracing paper of exceptional strength and transparency; takes ink and water color without buckling; stands erasing perfectly.

30 inches wide....................Per roll of 20 yards.
36 inches wide....................
42 inches wide....................

No. 176. **PARLOX** Tracing Paper. An imported prepared tracing paper of extraordinary strength and transparency. Has a bluish color, somewhat like that of tracing cloth. It does not deteriorate with age.

42 inches wide....................Per roll of 20 yards,

No. 177. **VELOUR** Tracing Paper. A dull-finish tracing paper of exceptional strength and transparency; takes ink and water color without buckling; stands erasing perfectly.

36 inches wide....................Per roll of 20 yards,
42 inches wide....................

No. 177H. **VELOUR** Tracing Paper. Heavier than No. 177. Excellent substitute for tracing cloth. A dull-finish tracing paper of exceptional strength and transparency; takes ink and water color without buckling; stands erasing perfectly.

30 inches wide....................Per roll of 20 yards,
36 inches wide....................
42 inches wide....................

No. 178. **ROYAL** Tracing Paper. Very tough and transparent. Excellent for blue prints.

42 inches wide....................Per roll of 20 yards,

No. 179. **EXCELALL** Tracing Paper. This treated Tracing Paper prepared on very tough all-rag stock is free from odor, will not discolor with age and is especially adapted for making fine blue prints from pencil work, takes ink without buckling and stands erasing perfectly.

36 inches wide....................Per roll of 20 yards,
42 inches wide....................

TUBES made of strong pasteboard can be furnished for preserving "Imperial" and "Velour" Tracing Papers at slight extra charge.

Sample Book of Drawing and Tracing Papers on Request.

Our Roll Tracing Papers Cut Into Any Size Sheets Desired.

"CORONA" "PRIMO" "STANDARD" "COMMERCIAL" BLUE PRINT PAPERS

CANNOT BE EQUALED FOR INVARIABLE QUALITY, DURABILITY AND RICHNESS OF COLOR.

FAVORITES FOR OVER THIRTY YEARS.

These famous BLUE PRINT PAPERS have been manufactured by us for over a quarter of a century, in accordance with a standard established in our laboratories when we were one of the pioneers in this business. The success and continued growth of our coating department is without comparison and manifests the wisdom of continuously producing a dependable article. The paper used is manufactured exclusively for us, according to our specifications, and each roll must measure up to a standard, each chemical solution with which this paper is coated must pass a laboratory test before being applied, thus assuring you a constant uniformity of the finished product of unexcelled keeping and printing qualities. We might write page upon page telling you how good these papers are, but prefer to send you sample rolls prepared with such solution as you require. Our Blue Print Papers are made of four different grades of stock. The sensitizing solution is the same for all grades.

CORONA. Made of a special quality of high-grade, selected, 100% rag stock, producing a paper which is particularly well adapted to take alterations in either ink or water color.

PRIMO. Made of high-grade, 100% rag stock, is chemically pure and possesses extreme tensile strength.

STANDARD. Made of high-grade, chemically pure, 50% rag stock; uniform strength and finish.

COMMERCIAL. Made of high-grade, carefully tested, 50% rag stock to meet the demands of an inexpensive paper for ordinary commercial use.

PRINTING SPEEDS

We coat our papers with five different solutions, as follows:

"A" (regular). Requires about four-minute exposure in bright sunlight.

"B" (rapid). Requires about one-minute exposure in bright sunlight.

"C" (extra rapid). Requires about thirty to forty seconds exposure in bright sunlight.

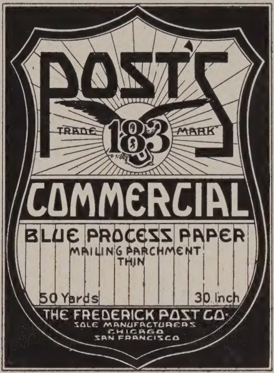
"D" (electric rapid). Fast printing speed. Suitable only for rapid electric printing.

"E" (extra electric rapid). Made especially for machines equipped with Cooper-Hewitt lamps.

We do not carry any sensitized papers in stock. Our facilities for coating are so extensive that we can coat and ship paper within twenty-four hours after receipt of order.

See Telegraphic Code on Pages 32 and 33.

POST'S "COMMERCIAL" BLUE PRINT PAPER


POST'S
TRADE MARK
183
COMMERCIAL
BLUE PROCESS PAPER
MAILING PARCHMENT
THIN
50 Yards
30 Inch
THE FREDERICK POST CO.
SOLE MANUFACTURERS
CHICAGO
SAN FRANCISCO

Sensitized daily with our "A" (Regular), "B" (Rapid), "C" (Extra Rapid), "D" (Electric Rapid) or "E" (Extra Electric Rapid) printing solutions.

No. 180. **COMMERCIAL.** Heavy.

Width	24in.	27 in.	30 in.	36 in.	42 in.	54 in.	
Roll of 10 yds. prepared						220	10%
Roll of 50 yds. prepared						950	

No. 183. **COMMERCIAL.** Thin.

Width	24in.	27 in.	30 in.	36 in.	42 in.	54 in.	
Roll of 10 yds. prepared						180	
Roll of 50 yds. prepared						770	10%

No. 184. **COMMERCIAL.** Medium.

Width	24in.	27 in.	30 in.	36 in.	42 in.	54 in.	
Roll of 10 yds. prepared						205	
Roll of 50 yds. prepared						7.95	10%

When ordering, be sure to specify which printing speed is desired. See page 24 for description of papers and printing solutions.

We will be pleased to send you sample roll sensitized with the desired printing solution for test purposes, if requested.

UNPREPARED PAPERS LISTED ON PAGE 27.

See Telegraphic Code on Pages 32 and 33.

POST'S "STANDARD" BLUE PRINT PAPER

POST'S
TRADE
185
MARK
STANDARD
BLUE PROCESS PAPER
MEDIUM SATIN
50 Yards
24 Inch
THE FREDERICK POST CO.
SOLE MANUFACTURERS
CHICAGO
SAN FRANCISCO

Sensitized daily with our "A" (Regular), "B" (Rapid), "C" (Extra Rapid), "D" (Electric Rapid), or "E" (Extra Electric Rapid) printing solutions.

No. 185. **STANDARD.** Heavy.

Width	24 in.	27 in.	30 in.	36 in.	42 in.	54 in.
Roll of 10 yds. prepared						
Roll of 50 yds. prepared						

No. 186 **STANDARD.** Extra heavy.

Width	30 in.	36 in.	42 in.	54 in.
Roll of 10 yds. prepared				
Roll of 50 yds. prepared				

No. 187. **STANDARD.** Special extra heavy.

Width	30 in.	36 in.	42 in.
Roll of 10 yds. prepared			
Roll of 50 yds. prepared			

No. 188. **STANDARD.** Thin.

Width	30 in.	36 in.	42 in.	54 in.
Roll of 10 yds. prepared				
Roll of 50 yds. prepared				

No. 189. **STANDARD.** Medium.

Width	30 in.	36 in.	42 in.
Roll of 10 yds. prepared			
Roll of 50 yds. prepared			

When ordering, be sure to specify which printing speed is desired. See page 24 for description of papers and printing solutions.

We will be pleased to send you a sample roll of this paper sensitized with the desired printing solution for test purposes, if requested.

UNPREPARED PAPERS LISTED ON PAGE 27.

See Telegraphic Code on Pages 32 and 33.

PRIMO
UNPREPARED BLUE PRINT PAPERS AND CLOTH

PRIMO PAPERS are made of the finest grade of linen rags obtainable and are guaranteed to be chemically pure. These papers having unusual tensile strength and uniformity are suitable for a variety of uses where a pure, white, strong and smooth-surfaced paper is required.

No. 190. **PRIMO.** Unprepared. Heavy.
(Same as our No. 210 Prepared Paper.)
Width 30 in. 36 in. 42 in. 54 in.
Rolls of 50 yds. Unprepared.

No. 191. **PRIMO.** Unprepared. Extra heavy.
(Same as our No. 211 Prepared Paper.)
Width 30 in. 36 in. 42 in.
Roll of 50 yds. Unprepared.

No. 192. **PRIMO.** Unprepared. Thin.
(Same as our No. 213 Prepared Paper.)
Width 30 in. 36 in. 42 in. 54 in.
Roll of 50 yds. Unprepared.

No. 194. **PRIMO.** Unprepared. Medium.
(Same as our No. 215 Prepared Paper.)
Width 30 in. 36 in. 42 in.
Roll of 50 yds. Unprepared.

No. 196. **PRIMO. BLUE PRINT CLOTH.** Unprepared. **Heavy.**
(Same as our No. 216 Prepared Cloth.)
Width 30 in. 36 in. 42 in. 54 in.
Roll of 10 yds. Unprepared.

No. 196½. **PRIMO. BLUE PRINT CLOTH.** Unprepared. **Thin.**
(Same as our No. 216½ Prepared Cloth.)
Width 36 in. 42 in.
Roll of 10 yds. Unprepared.

No. 197. **PRIMO. BLUE PRINT CLOTH.** Unprepared. Medium.
(Same as our No. 214 Prepared Cloth.)
Width 30 in. 36 in. 42 in. 54 in.
Roll of 10 yds. Unprepared.

Special Prices on Unprepared Papers in Original Mill Roll Shipments on Request.

POST'S PRIMO BLUE PRINT PAPER

POST'S
TRADE 216½ MARK
PRIMO
BLUE PROCESS CLOTH
THIN
Yards
Inch
THE FREDERICK POST CO.
SOLE MANUFACTURERS
CHICAGO
SAN FRANCISCO

Sensitized daily with our "A" (Regular), "B" (Rapid), "C" (Extra Rapid), "D" (Electric Rapid), or "E" (Extra Electric Rapid) printing solution.

No. 210. **PRIMO** Heavy.

Width	27 in.	30 in.	36 in.	42 in.	54 in.
Roll of 10 yds. prepared					
Roll of 50 yds. prepared					

No. 211. **PRIMO** Extra heavy.

Width	27 in.	30 in.	36 in.	42 in.	54 in.
Roll of 10 yds. prepared					
Roll of 50 yds. prepared					

No. 213. **PRIMO** Thin.

Width	27 in.	30 in.	36 in.	42 in.	54 in.
Roll of 10 yds. prepared					
Roll of 50 yds. prepared					

No. 215. **PRIMO** Medium.

Width	27 in.	30 in.	36 in.	42 in.	54 in.
Roll of 10 yds. prepared					
Roll of 50 yds. prepared					

PRIMO BLUE PRINT CLOTH

Rapid or regular solution only.

No. 214. **PRIMO BLUE PRINT CLOTH.** Medium.

Width	30 in.	36 in.	42 in.
Roll of 10 yds. prepared			
Roll of 50 yds. prepared			

No. 216. **PRIMO BLUE PRINT CLOTH.** Heavy.

Width	30 in.	36 in.	42 in.	54 in.
Roll of 10 yds. prepared				
Roll of 50 yds. prepared				

No. 216½. **PRIMO BLUE PRINT CLOTH.** Thin.

Width.	30 in.	36 in.	42 in.
Roll of 10 yds. prepared			
Roll of 50 yds. prepared			

See Telegraphic Code on Pages 32 and 33.

POST'S "CORONA" BLUE PRINT PAPER

HIGHEST QUALITY

POST'S
TRADE MARK
217A
CORONA
BLUE PROCESS PAPER
MEDIUM SATIN
50 Yards
24 Inch
THE FREDERICK POST CO.
SOLE MANUFACTURERS
CHICAGO
SAN FRANCISCO

Our **CORONA** Blue Print Papers are made of the highest grade of Selected Linen Stock, and are guaranteed to be absolutely chemically pure. The utmost care is preserved in the process of manufacturing, the Linen Stock being well seasoned, to obtain a reliable and durable product.

Our papers will be found excellent in strength and uniformity, and possess unexcelled keeping and printing qualities.

No. 217A. **CORONA** Heavy.

Width	30 in.	36 in.	42 in.	54 in.
Per roll of 10 yards, prepared				
Per roll of 50 yards, prepared				

No. 217B. **CORONA** Extra heavy.

Width	30 in.	36 in.	42 in.
Per roll of 10 yards, prepared			
Per roll of 50 yards, prepared			

No. 217C. **CORONA** Thin.

Width	30 in.	36 in.	42 in.	54 in.
Per roll of 10 yards, prepared				
Per roll of 50 yards, prepared				

No. 217D. **CORONA** Extra thin.

Width	30 in.	36 in.	42 in.
Per roll of 10 yards, prepared			
Per roll of 50 yards, prepared			

When ordering, be sure to specify which printing speed is desired. See page 24 for description of papers and printing solutions. We will be pleased to send you a sample roll of the paper sensitized with the desired solution for test purposes, if requested.

Unprepared Papers listed on Page 27.

See Telegraphic Code on Pages 32 and 33.

"PRIMO SEPIA-SOLAR" PAPER

The finest **SEPIA-SOLAR** PAPER on the market for making NEGATIVE Prints, POSITIVE BLUE Prints and POSITIVE BROWN Prints on paper or cloth.

Prints produced from **PRIMO SEPIA-SOLAR** PAPER are DISTINCT, CLEAR and PERMANENT, and can be ALTERED and COLORED the same as an original drawing.

PRIMO SEPIA-SOLAR PAPER is simple and speedy in action.
It keeps exceedingly well.
Saves original tracings.
Does not become brittle.
Prints are rich in tone and color and possess great durability.
Reproduces Patent Office drawings quickly.
Excellent for Map work.

METHOD OF USING PRIMO SEPIA-SOLAR PAPER

From the original tracing a NEGATIVE copy (white lines on an opaque dark background) is made on THIN **PRIMO SEPIA-SOLAR** Paper. From this negative, used in place of the original tracing, the following kinds of prints can be made:

POSITIVE BLUE PRINTS

(Dark blue lines on a white background)

Requiring about seven minutes exposure in bright sunlight when our "A" (Regular) speed Blue Print Paper or Cloth is used, or two minutes when our "B" (Rapid) speed Blue Print Paper or Cloth is used.

POSITIVE BROWN PRINTS

(Dark brown lines on a white background)

Made by using our **PRIMO SEPIA-SOLAR** Paper or Cloth with about five minutes exposure in bright sunlight.

SAMPLE ROLLS OF OUR PRIMO SEPIA-SOLAR PAPERS FOR TEST PURPOSES MAILED ON REQUEST.

POST'S PRIMO SEPIA-SOLAR PAPER

POSITIVE

ONE ROLL
PRIMO
SEPIA SOLAR
PAPER
No. 218
Lbs.
36 Inch.
10 Yards
POST
NEW YORK & CHICAGO

No. 218. **PRIMO** SEPIA-SOLAR PAPER. Thin. For Negatives.
Width 30 in. 36 in. 42 in. 54 in.
Roll of 10 yds., prepared...... Roll of 50 yds., prepared......

No. 219. **PRIMO** SEPIA-SOLAR PAPER. Extra thin. For Negative prints.
Width 30 in. 36 in. 42 in. 54 in.
Roll of 10 yds., prepared...... Roll of 50 yds., prepared......

No. 220. **PRIMO** SEPIA-SOLAR PAPER. Heavy. For Positives.
Width 30 in. 36 in. 42 in. 54 in
Roll of 10 yds., prepared...... Roll of 50 yds., prepared.....

No. 221. **PRIMO** SEPIA-SOLAR PAPER. Extra heavy. For Positives.
Width 30 in. 36 in. 42 in. 54 in.
Roll of 10 yds., prepared...... Roll of 50 yds., prepared......

No. 222. **PRIMO** SEPIA-SOLAR CLOTH. Heavy. For Positives.
Width 30 in. 36 in. 42 in. 54 in.
Roll of 10 yds., prepared...... Roll of 50 yds., prepared......

No. 222½. **PRIMO** SEPIA-SOLAR CLOTH. Thin
Width 30 in. 36 in. 42 in.
Roll of 10 yds., prepared...... Roll of 50 yds., prepared......

Fixing Salts and full directions sent with each roll.

PRIMO SEPIA FIXING SALTS

For permanently fixing and intensifying prints.

No. 224. **PRIMO** Sepia Fixing Salts, 4-oz. box, each..............

No. 225. **PRIMO** Sepia Fixing Salts, 1-lb. box, each..............

"PRIMO" POSITIVE BLACK PRINT PAPER

Primo positive black print paper is used the same as blue print paper. Requires only one bath and will produce black lines on white background and, if desired, water colors can be applied with ease.

Full instructions furnished with each roll.

No. 226. **PRIMO** POSITIVE BLACK PRINT PAPER.
Width 30 in. 36 in. 42 in.
Roll of 10 yards..................

TELEGRAPHIC CODE

For Prepared Papers and Cloths.

COMMERCIAL BLUE PRINT PAPERS.

		30 inch	36 inch	42 inch	54 inch
No. 180.	Prepared per roll of 10 yards.	Sun	Star	Shine	
No. 180.	Prepared per roll of 50 yards.	Union	United	University	
No. 183.	Prepared per roll of 10 yards.	Rival	Roam	Route	
No. 183.	Prepared per roll of 50 yards.	Value	Vital	Vivid	
No. 184.	Prepared per roll of 10 yards.	Jail	Jump	Jones	
No. 184.	Prepared per roll of 50 yards.	Kitten	Kate	Kite	

STANDARD BLUE PRINT PAPERS.

		30 inch	36 inch	42 inch	54 inch
No. 185.	Prepared per roll of 10 yards.	Junta	Jacko	Just	Jam
No. 185.	Prepared per roll of 50 yards.	Kosmo	Keg	Kop	Keel
No. 186.	Prepared per roll of 10 yards.	Limbo	Lustre	Laflin	Language
No. 186.	Prepared per roll of 50 yards.	Mongrel	Milton	Midway	Meek
No. 187.	Prepared per roll of 10 yards.	Relish	Raffle	Rafter	
No. 187.	Prepared per roll of 50 yards.	Saucer	Savage	Sentry	
No. 188.	Prepared per roll of 10 yards.	Prince	Pauper	Pate	Plume
No. 188.	Prepared per roll of 50 yards.	Quest	Queer	Quake	Quart
No. 189.	Prepared per roll of 10 yards.	Tafty	Tag	Tailor	
No. 189.	Prepared per roll of 50 yards.	Valet	Valve	Vampire	

PRIMO BLUE PRINT PAPERS.

		30 inch	36 inch	42 inch	54 inch
No. 210.	Prepared per roll of 10 yards.	Act	Agne	Articles	Arm
No. 210.	Prepared per roll of 50 yards.	Banish	Bank	Buff	Bunt
No. 211.	Prepared per roll of 10 yards.	Cart	Cake	Cog	Cabin
No. 211.	Prepared per roll of 50 yards.	Debris	Day	Design	Deacon
No. 213.	Prepared per roll of 10 yards.	Grit	Garden	Gringo	Garb
No. 213.	Prepared per roll of 50 yards.	Heart	Hunter	Halo	Habit
No. 215.	Prepared per roll of 10 yards.	Nero	Nullus	Nurture	Napkin
No. 215.	Prepared per roll of 50 yards.	Opal	Okay	Oxen	Olive

PRIMO BLUE PRINT CLOTH.

		30 inch	36 inch	42 inch	54 inch
No. 214.	Prepared per roll of 10 yards.	Heron	Hickory	Hillock	
No. 214.	Prepared per roll of 50 yards.	Hilt	Hone	Holster	
No. 216.	Prepared per roll of 10 yards.	Inez	Isthmus	Iris	Indian
No. 216.	Prepared per roll of 50 yards.	Indigo	Island	Ice	Illinois
No. 216½.	Prepared per roll of 10 yards.	Long	Labor	Lume	
No. 216½.	Prepared per roll of 50 yards.	King	Kipper	Kismet	

CORONA BLUE PRINT PAPERS.

		30 inch	36 inch	42 inch	54 inch
No. 217A.	Prepared per roll of 10 yards.	Baboon	Badge	Barrack	Ballast
No. 217A.	Prepared per roll of 50 yards.	Caboose	Cady	Cage	Canteen
No. 217B.	Prepared per roll of 10 yards.	Dairy	Damper	Dash	
No. 217B.	Prepared per roll of 50 yards.	Earl	Editor	Elbow	
No. 217C.	Prepared per roll of 10 yards.	Fairy	Future	Fang	Fleece
No. 217C.	Prepared per roll of 50 yards.	Gazette	Genius	Gentle	Giant
No. 217D.	Prepared per roll of 10 yards.	Haggle	Hatter	Hamlet	
No. 217D.	Prepared per roll of 50 yards.	Image	Ignite	Illude	

Continued on Next Page.

TELEGRAPHIC CODE—Continued

PRIMO SEPIA-SOLAR PAPERS.

		30 inch	36 inch	42 inch	54 inch
No. 218.	Prepared per roll of 10 yards.	Race	Rubber	Saddle	Strop
No. 218.	Prepared per roll of 50 yards.	Rabbit	Robber	River	Rig
No. 219.	Prepared per roll of 10 yards.	Sold	Sale	Slide	Sap
No. 219.	Prepared per roll of 50 yards.	Rome	Ram	Rack	Ream
No. 220.	Prepared per roll of 10 yards.	Turbin	Uno	Vellum	Varney
No. 220.	Prepared per roll of 50 yards.	Tube	Tunnel	Tram	Team
No. 221.	Prepared per roll of 10 yards.	Save	Some	Smoke	Supreme
No. 221.	Prepared per roll of 50 yards.	Snow	Snake	Soap	Sand

PRIMO SEPIA-SOLAR CLOTH.

		30 inch	36 inch	42 inch	54 inch
No. 222.	Prepared per roll of 10 yards.	Wonder	Youth	Zest	Zebra
No. 222.	Prepared per roll of 50 yards.	World	Yonker	Yunt	Zion
No. 222½.	Prepared per roll of 10 yards.	Wood	Wren	Why	

PRIMO POSITIVE BLACK PRINT PAPER.

		30 inch	36 inch	42 inch
No. 226.	Prepared per roll of 10 yards.	Lund	Land	Lean

POST PROCESS CLOTH.

		30 inch	36 inch	42 inch	54 inch
No. 227.	Prepared per roll of 10 yards.	Tune	Tower	Towel	
No. 227.	Prepared per roll of 20 yards.	Mint	Monitor	Mansion	

"A"—Regular Printing—Requiring from three to four minutes exposure in sunlight.

"B"—Rapid Printing—Requiring one minute in sunlight.

"C"—Extra Rapid Printing is a special paper adapted for Electric Blueprinting Machines of the various makes. The full exposure is obtained by the fast-running speed of these machines, or bright sunlight.

"D"—Electric Rapid—Suitable only for extremely rapid electric printing.

"E"—Extra Electric Rapid—Made especially for machines equipped with Cooper-Hewitt lamps.

EXAMPLE FOR ORDERING.

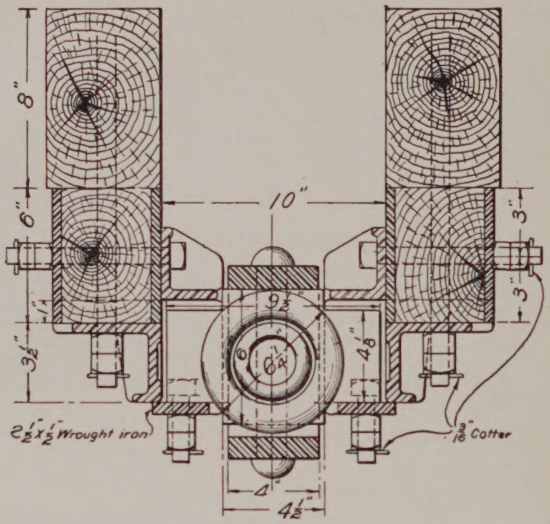
Former way—Ten fifty-yard rolls number one eighty-five each thirty, thirty-six, forty-two, extra rapid.

Correct way—Ten each Kosmo, Keg, Kop, C speed.

If 100-yard rolls are desired, use code words for 50-yard rolls and add to telegram the word "hundreds."

When ordering, specify which speed is desired—Regular "A," Rapid "B," Extra Rapid "C," Electric Rapid "D," or Extra Electric Rapid "E." Unless speed is specified we will send "C," Extra Rapid.

POST PROCESS



POST PROCESS

This is a method, invented and developed in our laboratories by which duplicates of original tracings can be reproduced on tracing cloth, white cloth or tracing paper at a cost far less than to have them duplicated by hand or any other process. It does not matter what the original tracing cost, nor how much time was required to draw it, a duplicate copy can be made in a few minutes and at a cost of a few cents per square foot.

Original tracings are valuable, and in many instances it would require many days to reproduce them if they should be lost or damaged.

A DUPLICATE MADE ON **POST PROCESS** CLOTH IS YOUR CHEAPEST INSURANCE.

Duplicate prints are produced in the following manner. A negative made on Post's Sepia-Solar paper is first made from the original tracing in our rapid clamp vacuum frame. A duplicate of the tracing is then printed from this negative, on sensitized Post Process cloth or paper, in the same manner that a blue print is made. This print is then developed with a special chemical and washed in a water bath. After drying, alterations and additions can be made if desired. The print is then coated with a transparent waterproof coating.

The finished print has the appearance of the original and will stand more handling without showing wear, and better blue prints can be made from them than from the original tracings.

Send us one of your tracings and allow us to demonstrate to you the wonderful possibilities of this process.

POST PROCESS

POST PROCESS can be installed quickly and is simple to handle. After we have equipped you with Post's RAPID CLAMP Vacuum Frame, a tank, water spray and brush, at a reasonable cost, all you require are Post's

Negative Papers No. 218 or 219.

POST PROCESS Cloth No. 227 or No. 227½.

Developing and Top Coating Solutions.

We furnish you with complete directions and co-operate with you at all times in the use of this wonderful and practical process.

POST PROCESS CLOTH

No. 227.	30 inch	36 inch	42 inch
Per 10 yard roll.			
Per 20 yard roll.			
Per yard.			

No. 227½.	30 inch	36 inch	42 inch	54 inch
Per 10 yard roll.				
Per 20 yard roll.				
Per yard.				

No. 227A. Top Coating Solution........................Per gallon,

No. 227B. Developer B................................Per pound,

No. 227C. Developer C................................Per pound,

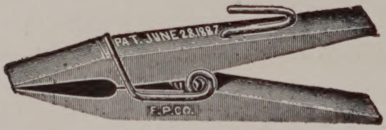
Developers B and C are dissolved and combined before using.

Correspondence welcomed requesting particulars as to equipment, directions, samples and prices.

IMPORTANT

POST PROCESS copies, perfectly, original tracings. It preserves the original intact. It makes the copies on white cloth or Tracing Cloth. The lines are clean-cut, distinct and opaque. Any drafting room, be it large or small, can save the time of high-priced draftsmen for the really productive work, by leaving all copying work to be taken care of by the **POST PROCESS.**

PHOTOGRAPHIC CLIPS


PAT. JUNE 28,1887
F.P.CO.

No. 229

		Per Doz.	Gross
No. 229.	Spring Clips for hanging prints to dry........		

ERASING FLUIDS

FULL 3/4 OZ.
POST'S
No 230 WHITE
PRIMO ERASING FLUID
DIRECTIONS FOR USING
POST'S
WHITE
PRIMO ERASING FLUID

No. 230. **WHITE Primo Erasing Fluid.** For making alterations and additions on blue prints.
Per bottle of ¾-oz. ....

No. 231. **RED Primo Erasing Fluid.** For marking or coloring blue prints.
Per bottle of ¾-oz...............................

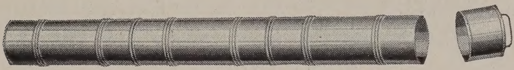
No. 232. **YELLOW Primo Erasing Fluid.** For marking or coloring blue prints.
Per bottle of ¾-oz...............................

No. 232½. **GREEN Primo Erasing Fluid.** For marking or coloring blue prints.
Per bottle of ¾-oz...............................

No. 233. **PRIMO SEPIA Erasing Fluid.** For making alterations on Primo Sepia-Solar Prints (Brown Prints).
Per bottle of ¾-oz...............................

AIR-TIGHT METAL TUBES

For Preserving Sensitized Paper



No. 236

Made of galvanized tin with close-fitting covers. Keeps Blue Print and Brown Print Papers dry and dark, and also used for the safekeeping of valuable tracings.

No. 236.	For 50-yard rolls,	31 inches long,	4 inches diameter	. . . .Each,
237.	" " "	37 " "	4 " "	. . . . "
238.	" " "	43 " "	4 " "	. . . . "
236A.	" 10-yard "	31 " "	2 " "	. . . . "
237A.	" " "	37 " "	2 " "	. . . . "
238A.	" " "	43 " "	2 " "	. . . . "

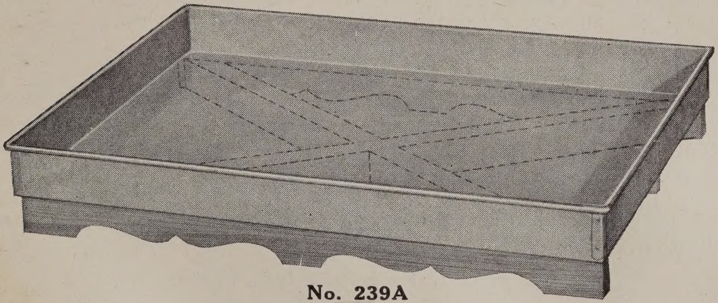
PASTEBOARD TUBES WITH METAL SCREW CAPS

For Mailing and Preserving 10-Yard Rolls of Sensitized Paper

Made of strong Jute stock with tight-fitting screw caps

No. 236½.	31 inches long,	2½ inches diameter	. . . . .Each,
237½.	37 " "	2½ " "	. . . . "
238½.	43 " "	2½ " "	. . . . "

GALVANIZED IRON BATH TRAYS



No. 239A

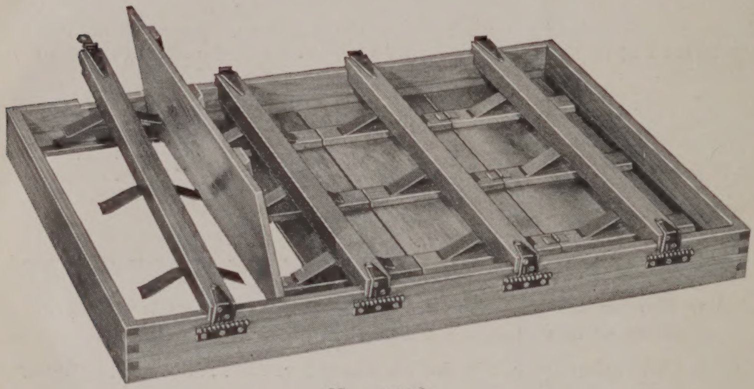
Zinc or galvanized iron trays with drain pipe, strong-wired rim and hardwood braces.

No. 239A.	18 × 22 inches,	3 inches deep	. . . . .Each,
239B.	20 × 24 "	3 " "	. . . . "
239C.	24 × 30 "	4 " "	. . . . "
239D.	30 × 42 "	4 " "	. . . . "
239E.	36 × 60 "	5 " "	. . . . "
239F.	42 × 72 "	5 " "	. . . . "

Other Sizes Made to Order

BLUE PRINT FRAMES

MADE OF BEST-SEASONED HARDWOOD. WARRANTED NOT TO SHRINK. NEATLY FINISHED WITH BRASS MOUNTINGS FURNISHED WITH OR WITHOUT FELT OR GLASS FIRST QUALITY



No. 240A

	Printing Surfaces		Inside Dimensions		Frames Only	With Felt Cushions	Complete With Glass
No. 240A.	20×24	inches,	21½×25½	Each,			
240B.	24×30	"	25½×31½	"			
240C.	24×36	"	25½×37½	"			
240D.	30×42	"	32 ×44	"			
240E.	36×48	"	38 ×50	"			
240F.	36×60	"	38 ×62	"			
240G.	42×60	"	44 ×62	"			
240H.	42×72	"	45 ×75	"			

The frames listed above can be furnished with carriages as per illustration on following pages.

See Price List for Price Information

SMALLER FRAMES FOR OFFICE USE

No. 242. 11×16 inches, with double-thick glass and pad........Each,
242A. 16×21 " " " " " " " .... "

All sizes for photographers' use carried in stock.

FELT FOR PRINTING FRAMES

No. 243. 72 inches wide..............................Per yard,

REPRODUCTION DEPARTMENT

In our Reproduction Department we are equipped with the most up-to-date machinery and methods for reproducing plans and prints by all processes.

Here, expert workmen who are specialists will execute your work promptly and with satisfaction.

BLUE PRINTS, BLUE LINE PRINTS, NEGATIVE PRINTS, POSITIVE BROWN LINE PRINTS

on Paper or Cloth

All our reproduction work of large Maps and Plans is turned out on CONTACT or VACUUM FRAMES of our own design, insuring perfect copies, with every detail shown, and WITHOUT any BLURRED PORTIONS or WITHOUT DISTORTION of the subject.

PHOTOSTAT PRINTS from any size from a postage stamp to 18x24 inches in size. Photostat copies are accepted in courts as prima facie evidence and, therefore, invaluable to attorneys, banks, trusteeships, detective agencies, etc.

New Tracings on Tracing Cloth from old are produced by us in a mechanical way on our celebrated

POST PROCESS CLOTH

We maintain a MOUNTING DEPARTMENT for mounting on muslin your Plans and Maps. Expert operators turn out first-class work. The matching of plans to be mounted in sections is perfect and the joints are spliced or beveled so as to make them almost invisible.

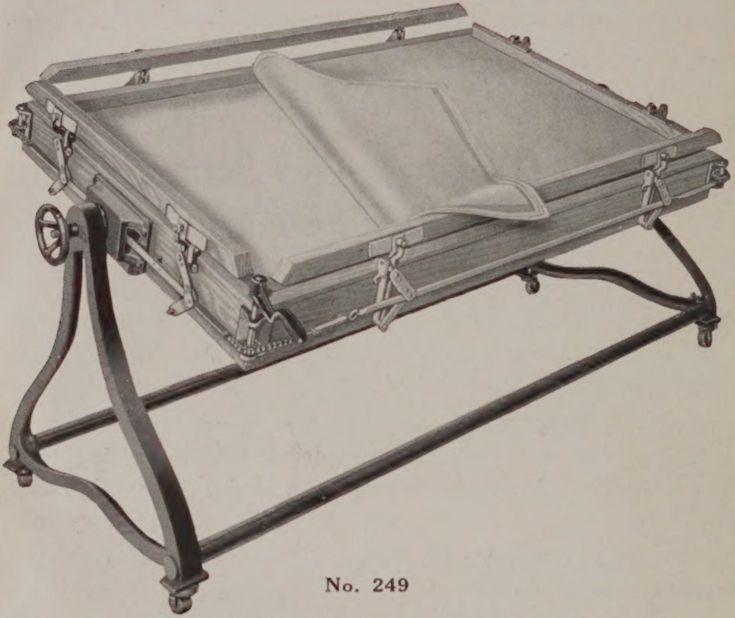
Price Lists covering the various classes of work will be furnished on request.

NOTE: Blue and Black Line Prints REQUIRE a Sepia Solar Negative from which the positive prints are made.

WE ASK AN OPPORTUNITY TO SHOW YOU HOW WELL WE CAN TAKE CARE OF YOUR ORDERS, ASSURING YOU THE BEST MATERIAL, THE BEST SERVICE AND CONSISTENT PRICES. DRAWINGS AND TRACINGS LEFT IN OUR CARE ARE STORED IN FIREPROOF VAULTS.

POST'S RAPID CLAMP VACUUM PRINT FRAME

All Clamps Open or Close With One Pull on the Lever



No. 249

This is the most perfect print frame in use. The quickest and easiest one to operate. Can be used for both sun and electric printing. The old methods, requiring the use of cross bars and springs or extra frames, to hold the blanket against the glass are no longer used. This is accomplished on POST'S **RAPID CLAMP** frame, by separate clamps, running parallel with the sides of the frame, all of which are operated automatically and simultaneously by a slight pull on a lever, fixed on one corner of the frame. This is clearly shown in the above illustration. The action is quick and positive. The construction is such that equal pressure is obtained at all points of contact.

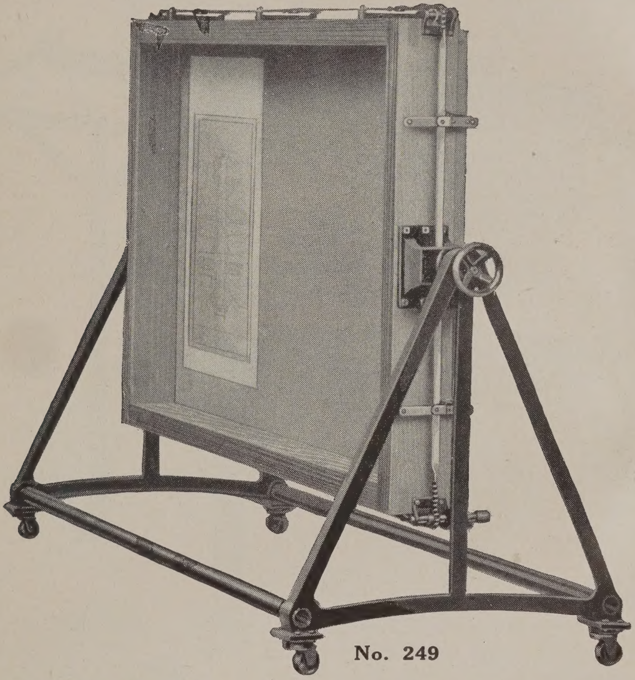
POST'S **RAPID CLAMP** VACUUM FRAME is made in our own factory of thoroughly seasoned hardwood. Every detail of its manufacture is supervised by experts.

POST'S **RAPID CLAMP** VACUUM FRAME will produce the best prints from the finest line drawings, or from old and worn tracings; will produce the most perfect negatives when used with POST'S **"PRIMO SEPIA SOLAR** Paper."

The contact is produced by exhausting the air from between a heavy rubber blanket and the glass by means of an exhaust pump. The vacuum produced insures the best possible contact between the tracing and the sensitized paper.

POST'S RAPID CLAMP VACUUM PRINT FRAME

ON CARRIAGE



No. 249

POST'S **RAPID CLAMP** VACUUM FRAME is mounted on a rigid iron frame, and so well-balanced that it can be revolved with a slight push. It can be firmly clamped in any desired position for loading or for exposure.

POST'S **RAPID CLAMP** VACUUM FRAME, furnished with or without polished plate glass, in the following sizes:

RAPID CLAMP VACUUM PRINTING FRAME WITHOUT CARRIAGE

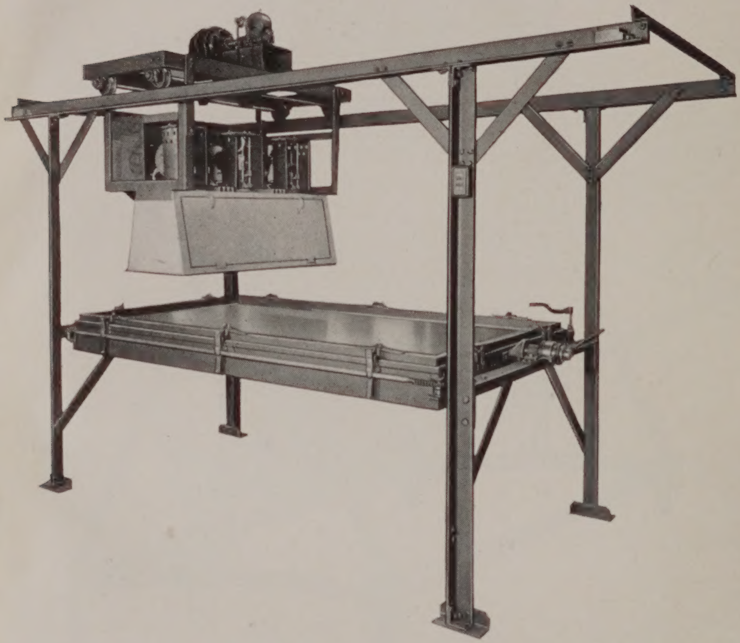
	Printing Surface	Inside Dimensions of Frame	Frame Only	Frame with Pad and Hose
No. 244A.	32x44	35x47		
244B.	44x56	47x59		
244C.	44x74	47x77		
244D.	56x86	60x90		
244E.	56x100	60x104		
244F.	56x122	60x126		

RAPID CLAMP VACUUM PRINTING FRAME ON CARRIAGE

			Frame with Pad, Hose and Carriage
No. 249A.	32x44	35x47	
249B.	44x56	47x59	
249C.	44x74	47x77	
249D.	56x86	60x90	
249E.	56x100	60x104	
249F.	56x122	60x126	

Other Sizes Made to Order

ELECTRIC LIGHTED VACUUM FRAMES



No. 250.

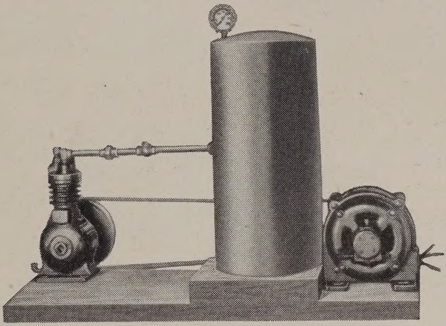
No. 250 Electric Lighted Vacuum Frame consists of our No. 244F—56x120-inch Vacuum Frame especially equipped with four 25 ampere arc lights which travel over the entire printing surface so that a frame full of negatives from ordinary tracings can be made in from six to eight minutes where 220 D.C. current is used.

This equipment is ideal for making large maps and Tracing Cloth Reproductions.

Absolute uniformity of light distribution is guaranteed by the arrangement of the hood over the four lamps, which projects and diverts the entire light volume.

No. 250. Outfit as illustrated..............................Each,
No. 250A. Outfit complete with all accessories except plate glass..Each,

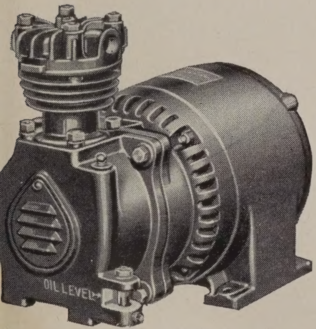
ELECTRIC AIR VACUUM OUTFIT



No. 245

This Outfit is very rigid and durably built so as to guarantee a uniform vacuum at all times. It is not recommended where more than one large Frame is used.

No. 245. Electric Air Vacuum Outfit, ¼ H.P. Motor (110 or 220 volts).
Complete with Tank................................Each,



No. 246

The No. 246 Electric Air Vacuum Pump is designed and built for heavy duty work and will give perfect satisfaction over a long period of years. It will handle two or three large Frames with satisfaction.

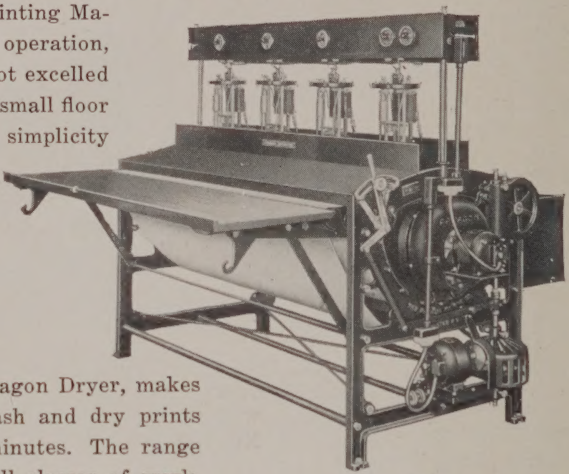
No. 246. Electric Air Vacuum Outfit, ½
H.P. Motor (110 or 220 volts).
Complete with Tank......Each,

No. 247. Rubber Vacuum Cushion....................Per Sq. Ft.,
No. 247A. Valve for Vacuum Pad..........................Each,

OIL CLOTH

No. 247½. Oil Cloth for covering plans and tracings. BLACK. 54 in. wide.
Per roll of 10 yards.................................
Per yard ....

PARAGON BLUE PRINTING MACHINE



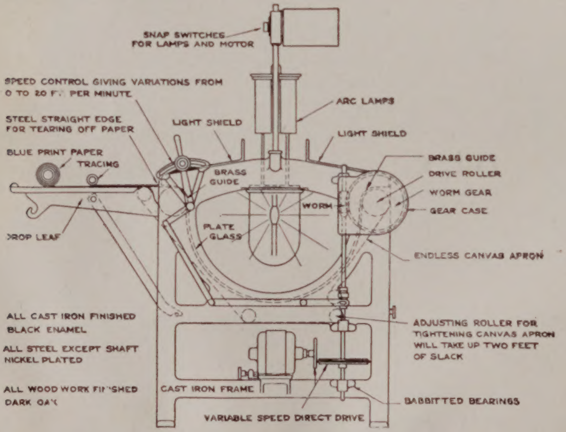
No. 253

Paragon Blue Printing Machine

See next page for Paragon Blue Print Drying Machines.

This Electric Blue Printing Machine for low cost of operation, speed and efficiency is not excelled by any other make. The small floor space required and the simplicity of operation, combined with other features, make the PARAGON a most desirable machine. The Paragon Machine, when used in connection with the Paragon Dryer, makes it possible to print, wash and dry prints perfectly flat in four minutes. The range of speed is ample for all classes of work.

No continuous blue printing machine in existence surpasses the PARAGON for low cost of operation, economical use of floor space and speed.

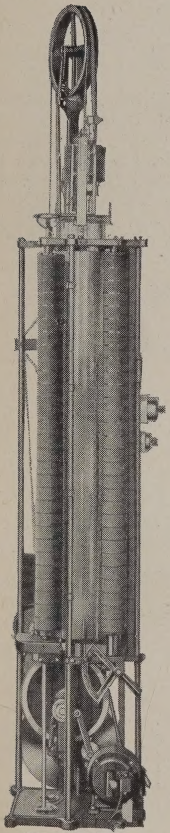

SNAP SWITCHES FOR LAMPS AND MOTOR
SPEED CONTROL GIVING VARIATIONS FROM 0 TO 20 FT. PER MINUTE
ARC LAMPS
STEEL STRAIGHT EDGE FOR TEARING OFF PAPER
LIGHT SHIELD
LIGHT SHIELD
BLUE PRINT PAPER
TRACING
BRASS GUIDE
BRASS GUIDE
DRIVE ROLLER
WORM GEAR
GEAR CASE
WORM
DROP LEAF
PLATE GLASS
ENDLESS CANVAS APRON
ALL CAST IRON FINISHED BLACK ENAMEL
ALL STEEL EXCEPT SHAFT NICKEL PLATED
ADJUSTING ROLLER FOR TIGHTENING CANVAS APRON WILL TAKE UP TWO FEET OF SLACK
ALL WOOD WORK FINISHED DARK OAK
CAST IRON FRAME
BABBITTED BEARINGS
VARIABLE SPEED DIRECT DRIVE

Write for booklet giving full details as to construction and method of operation.

		Approx. Shipping Weight
No. 253.	Capacity 42 in., complete	1,310 lbs.
No. 253A.	Capacity 54 in., complete	1,550 lbs.

When ordering, state voltage and whether current is direct or alternating; if alternating, specify number of cycles.

REVOLUTE ROCKET PRINTER



No. 253B
Revolute Rocket Printer

The Rocket Printer is intended particularly for those requiring blue prints in moderate quantities. The machine requires only 20 inches square of floor space.

The Rocket is not merely a vertical machine—it is a CONTINUOUS blue printer. The distinctively Revolute revolving contact is embodied in this machine: the contact belts, print paper, tracings and glass cylinder all revolve together at the same rate of speed, thus avoiding all static and insuring even, positive, frictionless contact.

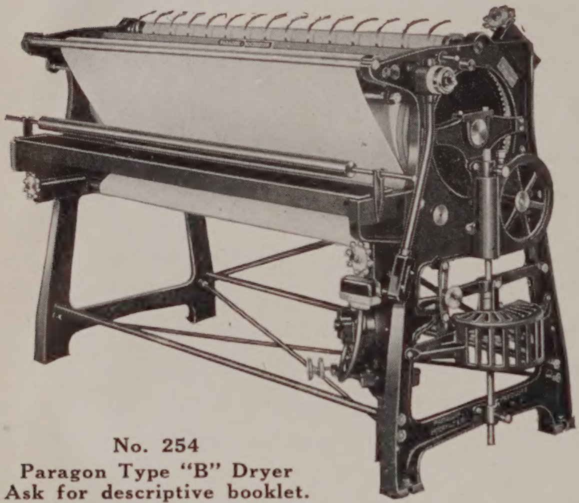
A series of narrow canvas belts carry the tracings and the sensitized paper. Each belt is provided with a guide which automatically keeps the belt in proper alignment.

The printing cylinder is 8¼ inches in diameter. The special blue printing arc lamp is moved up and down inside this cylinder by the same motor which drives the machine. The speed at which the lamp travels is, therefore, directly and automatically proportional to the speed of the machine. This insures even and proper exposure for the prints.

	Approx. Shipping Weight
No. 253B. Capacity 42 in., complete....................	600 lbs.

When ordering, state voltage and whether current is direct or alternating; if alternating, specify number of cycles.

PARAGON PRINT DRYING MACHINES

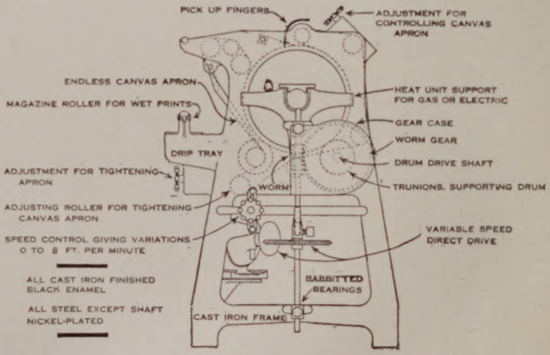


No. 254
Paragon Type "B" Dryer
Ask for descriptive booklet.

The Paragon Type "B" Print Dryer is similar to the Type "C" Machine, the difference in construction being in the size of the drying cylinder. In the Type "B" Dryer this cylinder has a circumference of over 3 feet.

The Paragon Print Drying Machines consist of a drying cylinder of smooth finished steel. The combination of heat and pressure between the carrying canvas and the cylinder dries the prints smooth and flat with a pleasing refinished surface. This hard, smooth finish makes it easy to note revisions on the print.

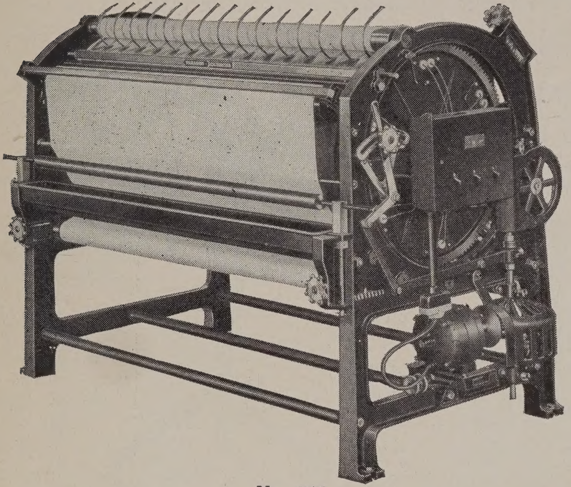
The steel cylinder is mounted on ball bearings, which in turn are mounted in sturdy, cast-iron end frames. The whole machine is carefully and substantially built to insure the rigidity which a dryer must possess to insure satisfactory service over a long period of time.


PICK UP FINGERS
ADJUSTMENT FOR CONTROLLING CANVAS APRON
ENDLESS CANVAS APRON
MAGAZINE ROLLER FOR WET PRINTS
HEAT UNIT SUPPORT FOR GAS OR ELECTRIC
GEAR CASE
WORM GEAR
DRIP TRAY
DRUM DRIVE SHAFT
ADJUSTMENT FOR TIGHTENING APRON
WORM
TRUNIONS, SUPPORTING DRUM
ADJUSTING ROLLER FOR TIGHTENING CANVAS APRON
VARIABLE SPEED DIRECT DRIVE
SPEED CONTROL GIVING VARIATIONS 0 TO 8 FT. PER MINUTE
ALL CAST IRON FINISHED BLACK ENAMEL
BABBITTED BEARINGS
ALL STEEL EXCEPT SHAFT NICKEL-PLATED
CAST IRON FRAME

		Approx. Shipping Weight
No. 254.	Capacity 30 in., complete, Electrically Heated..	690 lbs.
No. 254A.	Capacity 30 in., complete, Gas Heated........	666 lbs.
No. 254B.	Capacity 42 in., complete, Electrically Heated..	890 lbs.
No. 254C.	Capacity 42 in., complete, Gas Heated........	860 lbs.
No. 254D.	Capacity 54 in., complete, Electrically Heated..	1,100 lbs.
No. 254E.	Capacity 54 in., complete, Gas Heated........	1,070 lbs.

When ordering, state voltage and whether current is direct or alternating; if alternating, specify number of cycles.

PARAGON PRINT DRYING MACHINE



No. 255

TYPE "C" PARAGON JUMBO PRINT DRYER

Speed 8 to 14 lineal feet per minute.

This exceptional speed is obtained because the prints are held in contact with almost the entire surface of the heated cylinder whose circumference is more than 6 feet.

2,000 square feet of prints.

Due to the exceptional drying speed of this machine, 2,000 square feet of prints can be dried in one hour.

No Wringing Necessary.

PARAGON TYPE "C" DRYER

Ask for descriptive booklet.

Small or large prints of any length and of any width up to the rated capacity of the machine are handled with equal ease and dried perfectly flat and smooth. This machine dries cut sheets or continuous rolls, blue and brown prints, photostats and similar prints.

Jumbo Cylinder. The cylinder and all rollers carrying the canvas apron are steel, running on ball bearings. Diameter of the drying cylinder is 24 inches.

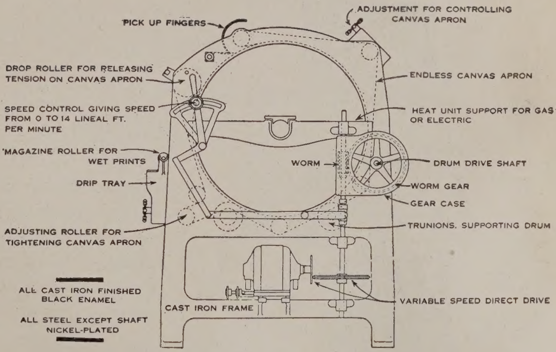

PICK UP FINGERS
ADJUSTMENT FOR CONTROLLING CANVAS APRON
DROP ROLLER FOR RELEASING TENSION ON CANVAS APRON
ENDLESS CANVAS APRON
SPEED CONTROL GIVING SPEED FROM 0 TO 14 LINEAL FT. PER MINUTE
HEAT UNIT SUPPORT FOR GAS OR ELECTRIC
MAGAZINE ROLLER FOR WET PRINTS
WORM
DRUM DRIVE SHAFT
DRIP TRAY
WORM GEAR
GEAR CASE
ADJUSTING ROLLER FOR TIGHTENING CANVAS APRON
TRUNIONS. SUPPORTING DRUM
ALL CAST IRON FINISHED BLACK ENAMEL
ALL STEEL EXCEPT SHAFT NICKEL-PLATED
CAST IRON FRAME
VARIABLE SPEED DIRECT DRIVE

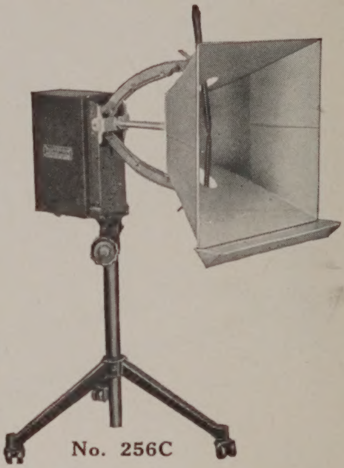
Diagram of Type "C" Paragon Jumbo Print Dryer

		Approx. Shipping Weight
No. 255.	Capacity 42 in., complete, Electrically Heated. .	1,390 lbs.
No. 255A.	Capacity 42 in., complete, Gas Heated	1,360 lbs.
No. 255B.	Capacity 54 in., complete, Electrically Heated. .	1,615 lbs.
No. 255C.	Capacity 54 in., complete, Gas Heated	1,585 lbs.

When ordering, state voltage and whether current is direct or alternating; if alternating, specify number of cycles.

HIGH-POWER ARC LAMPS

Lamps for Use with Vacuum Printing Frames



No. 256C

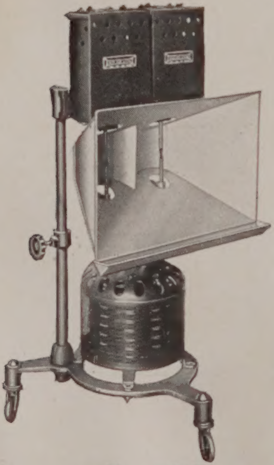
ATLAS SOLAR LITE

PRINTING LAMP

No. 256C. Solar Lite. A very compact printing lamp with a constant arc whose penetrating power cannot be equaled. It is very rapid in action.

How to Order

Specify Current and Voltage
110 volts A.C., D.C., or universal, 35 amperes
220 volts A.C., D.C., or universal, 25 amperes
No. 256C. Shipping weight, 120 lbs. Each,

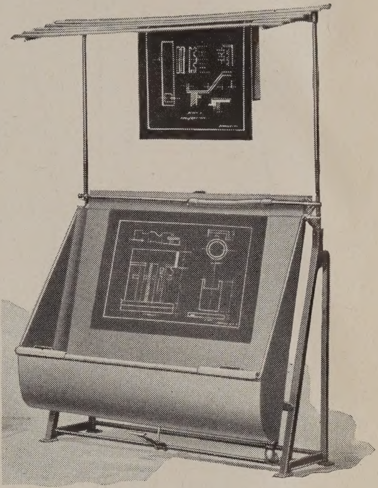


No. 256B

No. 256B. Double Open Arc. The world's best known printing lamp. Extremely fast; great covering power. Simple mechanism, easily handled. Wonderful results are being obtained with the very large frames with which two lamps are usually used. Especially efficient on 220 volts D.C. or A.C., 30 Amperes.

No. 256A. Single Open Arc, 30 Amp........................Each,
No. 256B. Double Open Arc, 30 Amp........................Each,

IMPROVED SHEET WASHER



No. 252

This Washer is especially recommended for use where limited production is required in connection with small continuous or upright machines. It eliminates the use of flat tanks which occupy large floor space.

No. 252WS. 42 in. wide....Each,

No. 252WL. 54 in. wide....Each,

CARBONS

Our high-grade Carbons are especially adapted for all types of blue print and photographic lamps. For direct current, two solid carbons give best results. For alternating current use one solid and one cored carbon.

	Per 100	Per 25
Cored—Size ½″x 9″		
Cored—Size ½″x12″		
Cored—Size ½″x16″		
Solid —Size ½″x 9″		
Solid —Size ½″x12″		
Solid —Size ½″x16″		
White Flame Carbons		
Cored—Size ½″x12″		

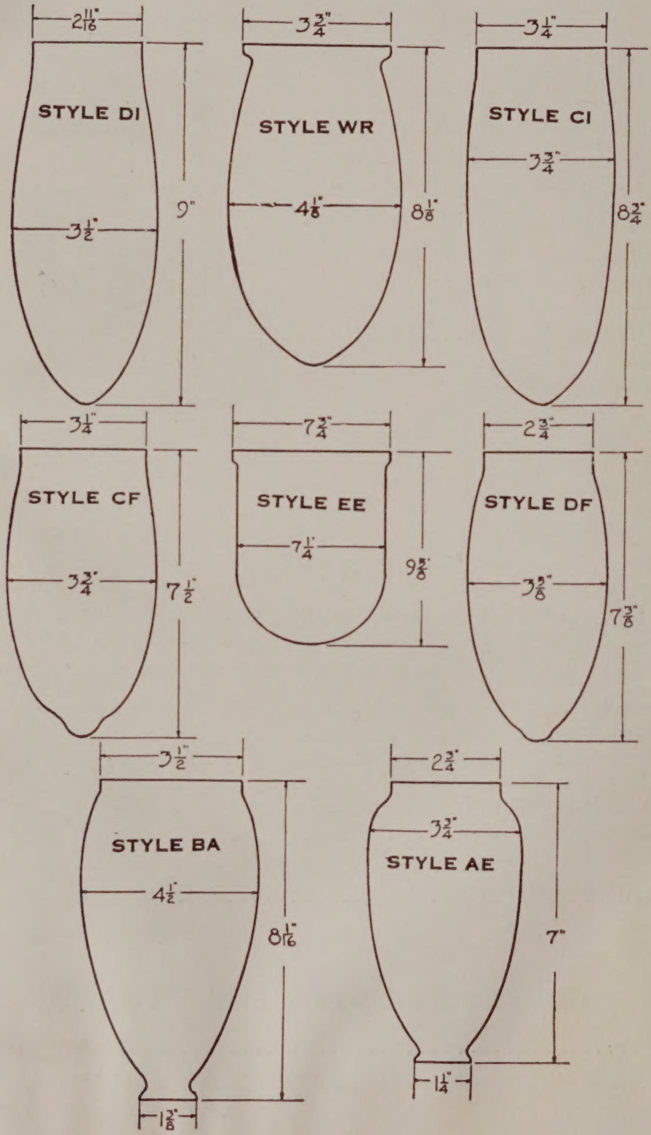
GLOBES FOR BLUE PRINT LAMPS

	Each	Dozen
No. 258		

When ordering, specify style required.

GLOBES FOR BLUE PRINT LAMPS

Diagram Showing Nos. and Sizes


2 11/16"
STYLE DI
3½"
9"
3¾"
STYLE WR
4⅛"
8⅛"
3¼"
STYLE CI
3¾"
8¾"
3¼"
STYLE CF
3¾"
7½"
7¾"
STYLE EE
7¼"
9⅝"
2¾"
STYLE DF
3⅝"
7⅜"
3½"
STYLE BA
4½"
8 1/16"
1⅜"
2¾"
3¾"
STYLE AE
7"
1¼"

THE STANDARD AND OTHER CONTRACT DOCUMENTS OF THE AMERICAN INSTITUTE OF ARCHITECTS

Equitable and Creditable to Architect, Owner and Contractor

TITLES—FORM No. 259

Style		Each	Per 100
A.	Agreement and General Conditions in cover.		
B.	General Conditions without Agreement......		
C.	Agreement without General Conditions......		
D.	Bond of Suretyship......................		
E.	Form of Subcontract.....................		
F.	Letter of Acceptance of Subcontractor's Proposal		
G.	Cover (heavy paper with valuable notes)...		
H.	Complete set in cover....................		

These documents have received the full approval of the Institute, through its Conventions, Board of Directors and Officers. They are the outcome of continuous work of many years by a Standing Committee on Contracts and Specifications. This Committee, comprising some of the ablest American architects, was assisted by the Institute's forty Chapters; advised by eminent legal specialists in contract law, and aided by representatives of the leading construction interests in the United States.

The forms have been officially approved by the National Associaiton of Builder's Exchanges, the National Association of Master Plumbers, the National Association of Sheet Metal Contractors of the United States, the National Electrical Contractors' Association of the United States, the National Association of Marble Dealers, the Building Granite Quarries Association, the Building Trades Employers Association of the City of New York, and the Heating and Piping Contractors National Association.

OTHER CONTRACT FORMS—No. 259½

Style		Each	Per 100
A.	Form of Agreement between Owner and Architect on the Percentage Basis..........		
B.	Form of Agreement between Owner and Architect on the Fee Plus Cost System......		
C.	Circular of Information on Fee Plus Cost System (Owner-Architect)................		
D.	Form of Agreement between Owner and Contractor (Cost Plus Fee Basis).............		
E.	Circular of Information on Cost Plus Fee System (Owner-Contractor)..............		

PREFERRED PROFILE PAPERS AND CLOTHS

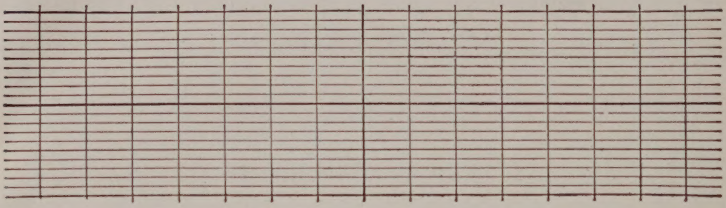


PLATE A—4x20 TO ONE INCH

Engraving 20 inches wide

			Roll	Yard
No. 260-G.	Green on drawing paper.........	50-yard rolls		
260-O.	Orange on drawing paper.........	50 " "		
261-G.	Green mounted on muslin........	20 " "		
261-O.	Orange mounted on muslin.......	20 " "		
268-G.	Green on tracing cloth..........	20 " "		
268-O.	Orange on tracing cloth.........	20 " "		
269-O.	Orange on tracing paper.........	50 " "		

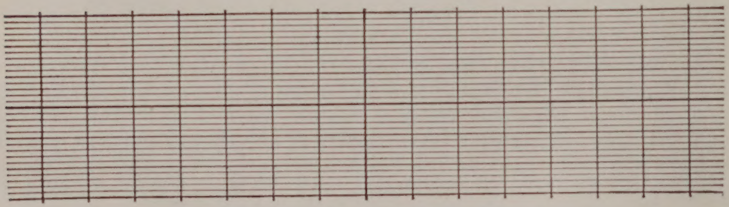


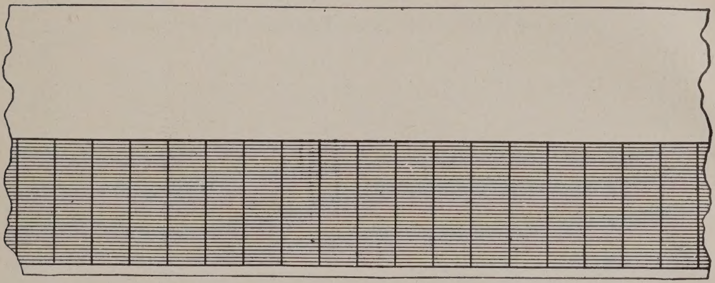
PLATE B—4x30 TO ONE INCH

Engraving 20 inches wide

			Roll	Yard
No. 270-G.	Green on drawing paper.........	50-yard rolls		
270-O.	Orange on drawing paper........	50 " "		
271-G.	Green mounted on muslin........	20 " "		
271-O.	Orange mounted on muslin......	20 " "		
278-G.	Green on tracing cloth..........	20 " "		
278-O.	Orange on tracing cloth.........	20 " "		
279-O.	Orange on tracing paper	50 " "		

Samples of Profile Papers on Request.

PREFERRED PROFILE PAPERS AND CLOTHS
PLAN-PROFILE



The ruled portion of Profile Plan Paper occupies but one-half of the width of the roll. The blank portion may be used to sketch complicated cuts or fills, embankments and excavations and for notes pertaining thereto. This convenient arrangement makes it possible to keep all information together for ready reference. This illustration shows merely the arrangement of the Plan-Profile.

PLATE A—4x20 TO ONE INCH
Width of Stock 12 in., Engraving 10 in.

		Roll	Yard
No. 260½G.	Green on drawing paper........50-yard rolls		
268½O.	Orange on tracing cloth........20 " "		
269½O.	Orange on tracing paper........50 " "		

PLATE A—4x20 TO ONE INCH
Width of Stock 22 in., Engraving 10 in.

		Roll	Yard
No. 262-G.	Green on drawing paper.......50-yard rolls		
263-G.	Green mounted on muslin......20 " "		
264-G.	Green on tracing cloth.........20 " "		
264-O.	Orange on tracing cloth........20 " "		
265-O.	Orange on tracing paper.......50 " "		

PLATE B—4x30 TO ONE INCH
Width of Stock 12 in., Engraving 9 in.

		Roll	Yard
No. 270½G.	Green on drawing paper.......50-yard rolls		
278½O.	Orange on tracing cloth.......20 " "		
279½O.	Orange on tracing paper.......50 " "		

PLATE B—4x30 TO ONE INCH
Width of Stock 22 in., Engraving 9 in.

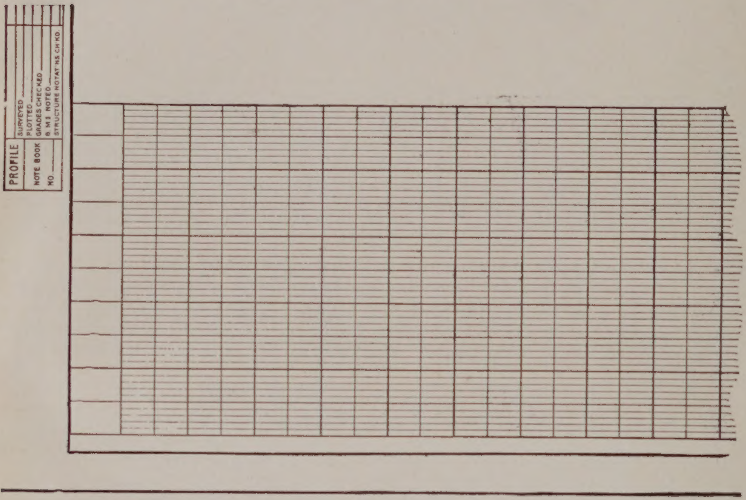
		Roll	Yard
No. 272-G.	Green on drawing paper.......50-yard rolls		
273-G.	Green mounted on muslin......20 " "		
274-G.	Green on tracing cloth........20 " "		
274-O.	Orange on tracing cloth........20 " "		
275-O.	Orange on tracing paper.......50 " "		

Samples of These Papers on Request.

FEDERAL AID SHEETS

As Recommended by the U. S. Department of Agriculture,

Office of Public Roads and Rural Engineering



No. 286-2P

No. 286-1P. Plan Profile Sheet, orange, **Tracing Paper,** size of sheet 23×36 in., size of border 22×33½ in., size of profile 10×33½ in. Profile lengthwise ruled to the half inch, in height to one-tenth of an inch. Two titles for profile and plan on left-hand side of sheet, outside of border line ....Per sheet........Per hundred

No. 286-1C. Plan Profile Sheet, like No. 286-1P, but Tracing Cloth............... Per sheet.........Per hundred

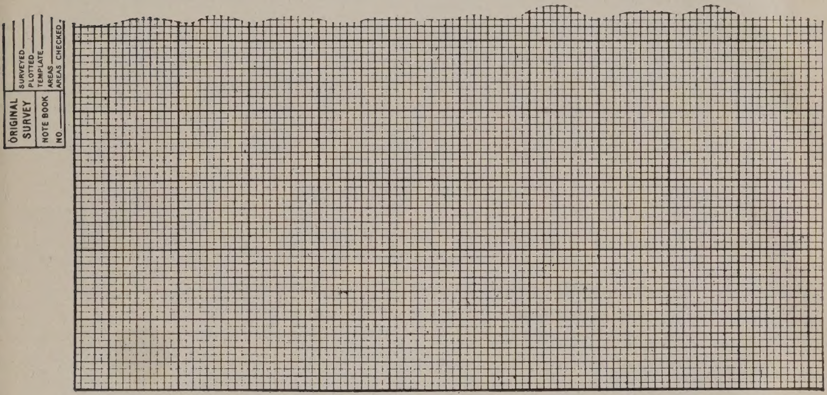
No. 286-2P. Double Plan Profile Sheet, for flat profiles, orange, **Tracing Paper,** size of sheet, border line and titles like 286-1P. Profile beginning at the bottom of the sheet has the same ruling as sheet No. 286-1P on the first quarter of the sheet; size of profile 5×32 in.; the second quarter is blank; the third quarter bears a profile like the first quarter, and the fourth quarter is blank. ....Per sheet........Per hundred

No. 286-2C. Double Plan Profile Sheet, like No. 286-2P, but Tracing Cloth............Per sheet........Per hundred

FEDERAL AID SHEETS

As Recommended by the U. S. Department of Agriculture,

Office of Public Roads and Rural Engineering



No. 286-3P

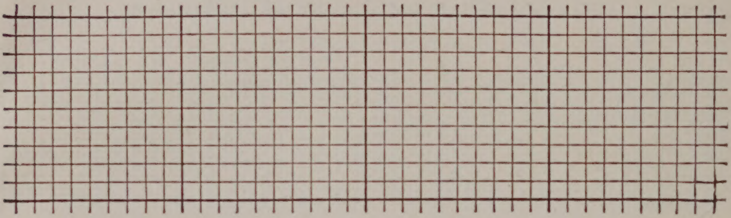
No. 286-3P. Cross Section Sheet, orange, **Tracing Paper;** size of sheet 23×36 in., size of border line 22×33½ in., size of profile 21×33½ in. Profile 10×10 to the inch, every tenth line heavy. Two titles for Original Survey and Final Survey on left-hand side of sheet, outside of border line . . . . Per sheet. . . . . Per hundred

No. 286-3C. Cross Section Sheet, like No. 286-3P, but Tracing Cloth. . . . . Per sheet. . . . . Per hundred

No. 286-4P. Plan Cross Section Sheet, orange, **Tracing Paper;** size of sheet, border line and titles like No. 286-3P. Cross section ruling beginning at the bottom of the sheet is the same as on 286-3P. It fills half of the sheet; size of profile 10×33½ in.; the second half being blank. . . . . Per sheet. . . . . Per hundred

No. 286-4C. Plan Cross Section Sheet, like No. 286-4P, but Tracing Cloth . . . . Per sheet. . . . . Per hundred

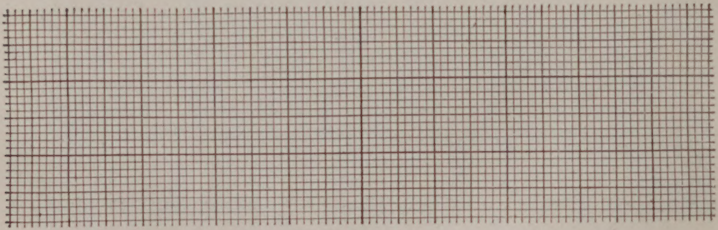
PREFERRED CROSS SECTION PAPERS AND CLOTHS IN SHEETS AND ROLLS



10x10 TO ONE INCH

Engraving 20 inches wide

		Roll	Yard
No. 290-G.	Green, on drawing paper........50-yard rolls		
290-O.	Orange, on drawing paper.......50 " "		
291-G.	Green, mounted on muslin.......20 " "		
291-O.	Orange, mounted on muslin......20 " "		
293-G.	Green, on tracing cloth..........20 " "		
293-O.	Orange, on tracing cloth.........20 " "		
294-O.	Orange, on tracing paper........50 " "		



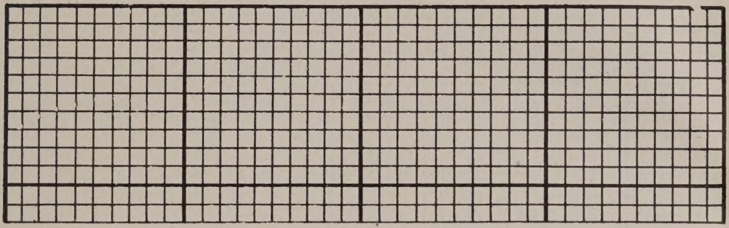
MILLIMETER

Engraving 50 cm. wide

		Roll	Yard
No. 296-G.	Green, on drawing paper........50-yard rolls		
296-O.	Orange, on drawing paper.......50 " "		
297-G.	Green, mounted on muslin.......20 " "		
297-O.	Orange, mounted on muslin......20 " "		
298-O.	Orange, on tracing paper........50 " "		
299-G.	Green, on tracing cloth..........20 " "		
299-O.	Orange, on tracing cloth.........20 " "		

Samples Mailed on Request.

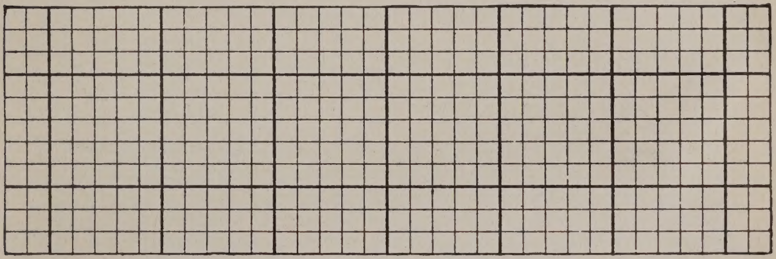
PREFERRED CROSS SECTION PAPERS IN SHEETS



10x10 TO ONE INCH

Sheets size 16x21

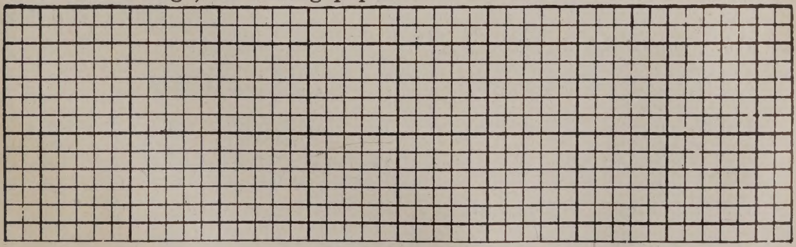
	Quire	Sheet
No. 307-G. Green, on ledger paper.................		
307-O. Orange, on ledger paper................		
308-O. Orange, on tracing paper...............		



8x8 TO THE INCH

Sheets size 16x21

	Quire	Sheet
No. 309-G. Green, on ledger paper.................		
309-O. Orange, on ledger paper................		
310-O. Orange, on tracing paper...............		

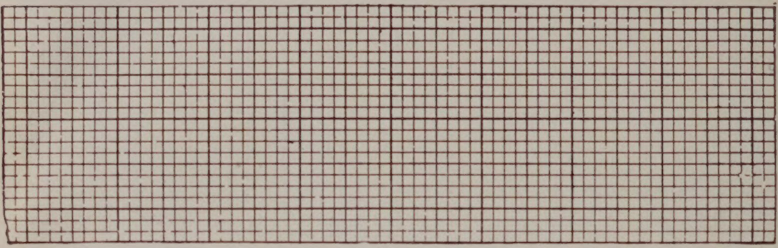


5x5 TO THE HALF INCH

Sheets size 16x21

	Quire	Sheet
No. 311-G. Green, on ledger paper.................		
311-O. Orange, on ledger paper................		
312-O. Orange, on tracing paper...............		

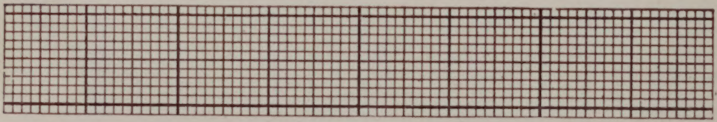
PREFERRED CROSS SECTION PAPERS IN SHEETS



16x16 TO THE INCH

Sheets size 16x21

	Quire	Sheet
No. 313-G. Green, on ledger paper.................		
313-O. Orange, on ledger paper................		
314-O. Orange, on tracing paper...............		



CONSTRUCTOR'S CROSS SECTION PAPERS

Printed in a neutral tint and orange

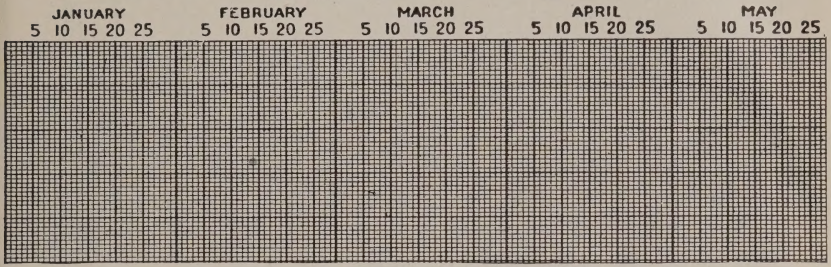
Nos. 315 to 319N. 10x10 TO HALF INCH, FIFTH LINES HEAVY

	Quire	Ream
No. 315. Neutral Tint, engraving 5x7½ in., drawing paper		
316-O. Orange Tint, engraving 5x7½ in., tracing paper		
316-N. Neutral Tint, engraving 5x7½ in., tracing paper		
317. Neutral Tint, engraving 7½x10 in., draw. paper		
318-O. Orange Tint, engraving 7½x10 in., tracing paper		
318-N. Neutral Tint, engraving, 7½x10 in., tracing paper		
319. Neutral Tint, engraving 10x15 in., drawing paper		
320-O. Orange Tint, engraving 10x15 in., tracing paper		
320-N. Neutral Tint, engraving 10x15 in., tracing paper		

PREFERRED CROSS SECTION PAPERS IN SHEETS

RECORD SHEETS

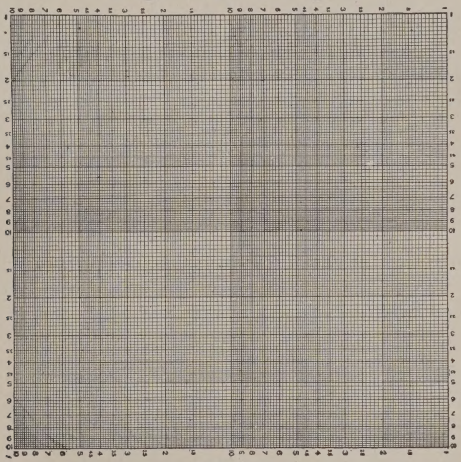
Statistical Diagrammatic Charts for Progress of Work



Nos. 321-322

No. 321. Engraving 7x12 in., on drawing paper, green...100 sheets,
322. Engraving 7x12 in., on tracing paper, orange... " "

Logarithmic Paper

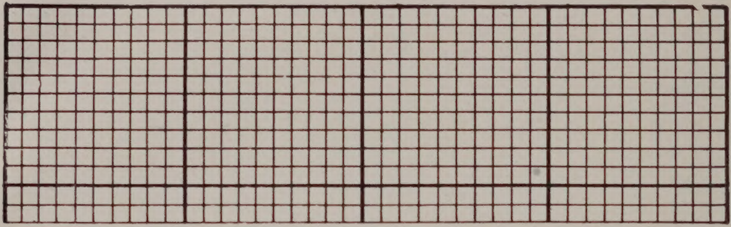


No. 324 Quire

No. 323. Engraving 10x10 in., on tracing paper, green, 5-in. base,
324. Engraving 10x10 in., on tracing paper, green, 10-in. base,

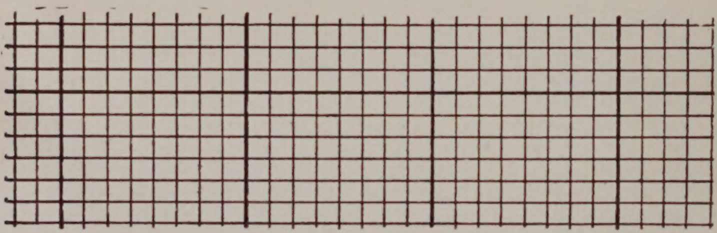
Logarithmic Paper is so ruled that the scales in each direction are logarithmic instead of uniform, as on other cross section papers; the numbers and the divisions are placed at points which make their distances from the origin proportional to the logarithm of such numbers, instead of to the numbers themselves. By means of this paper, logarithmic operations are performed graphically, without reference to the logarithms themselves. Many hydraulic and other engineering computations are facilitated by its use, and various relationships (sizes of tie-bars, shafts, etc., in terms of varying load, or the inverse; circumferences and diameters of circles in terms of their radii or diameters, or the inverse; weights of the series of bodies of the same substance and form but of varying size, or the inverse, etc.) can be represented.

PREFERRED CROSS SECTION PAPERS IN SHEETS



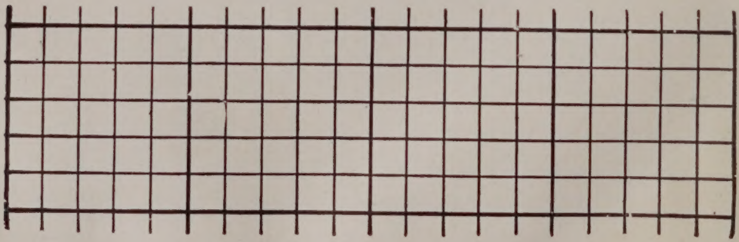
No. 342. 10x10 TO 1 INCH

	Ream	Quire
No. 342. Ruled in blue, on ledger paper 17x22......		



No. 344. 8x8 TO 1 INCH

	Ream	Quire
No. 344. Ruled in blue, on ledger paper, 17x22.....		

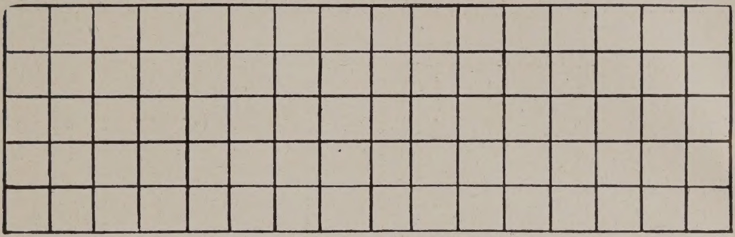


No. 345. 5x5 TO 1 INCH

	Ream	Quire
No. 345. Ruled in blue, on ledger paper 17x22......		

Samples of Cross Section Papers on Request.

PREFERRED CROSS SECTION PAPERS IN SHEETS

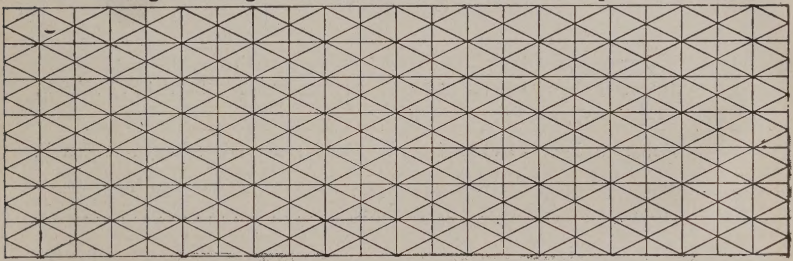


No. 346. 4x4 TO 1 INCH

	Topographical Paper	Ream	Quire
No. 346.	Ruled in blue, on ledger paper 17x22......		

ISOMETRIC SKETCHING PAPER

For Making Drawings and Sketches in Isometric Perspective. Ruled

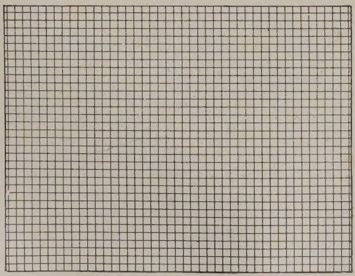


No. 348A

No. 348A. Ruled in green, in sheets 12x18 in..............Per quire,
348B. Ruled in green, in pads of 40 sheets, 6x 9 in..........Each,
348C. Ruled in green, in pads of 40 sheets, 9x12 in...........

QUADRILLE RULED CROSS SECTION PAPER

Ruled in blue on both sides

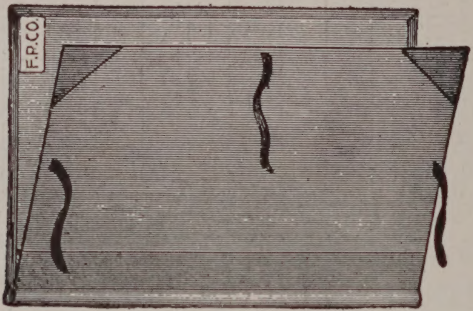


No. 339

		Ream	Quire
No. 339.	Sheets 17x22 in.—6x6 to 1 in...........		
340.	Sheets 17x22 in.—5x5 to 1 in...........		
341.	Sheets 17x22 in.—4x4 to 1 in...........		

Samples of Cross Section Papers on Request.

PORTFOLIOS



No. 349A

No. 349A. Paper Sides, Cloth Back and Corners, with three flaps.
Sizes, inches, 12x16, 14x18, 17x22, 20x26, 23x31....Each,

No. 349B. Cloth Sides, Leather Back and Corners, with three flaps.
Sizes, inches, 12x16, 14x18, 17x22, 20x26, 23x31....Each,

No. 349C. School Portfolio, without Flaps, Paper Sides, Cloth
Corners and Back. 20x26 inches..................Each,

ENVELOPES FOR DRAWING PAPER

Made of Extra Heavy, Strong Kraft Paper

No. 350A. 10x13½ inches......................................
350B. 12x16 " ....
350C. 14x21 " ....

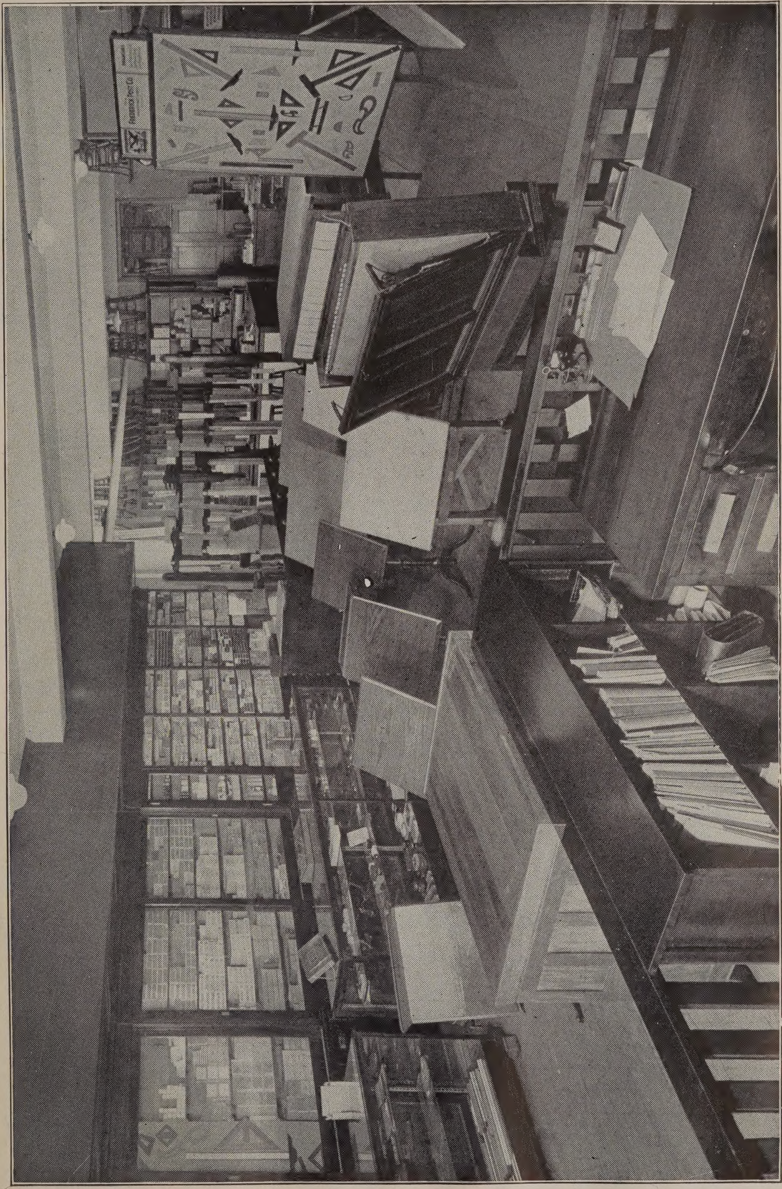
RULED CROSS SECTION PAPER PADS

No. 354. 8½x11 in., 10x10 to 1 inch, ruled in blue, 24 sheets...Each,
355. 8½x11 in., 8x 8 to 1 inch, ruled in blue, 24 sheets...
356. 8½x11 in., 4x 4 to 1 inch, ruled in blue, 24 sheets...

TRACING PAPER SKETCH PADS

Contains 50 sheets high-grade Tracing Paper, has extra sheet of Cross Section Paper ruled 8x8 and 10x10 for sketching guide. Each Pad in envelope.

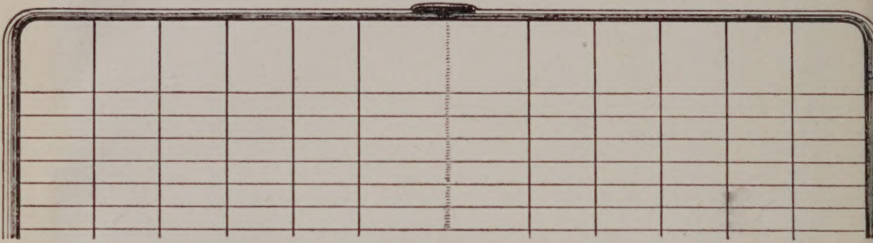
No. 366. Paper used is No. 166 Ivory Thin. Size 8½x11in...Each,
No. 367. Paper used is No. 167 Ivory Med. Size 8½x11in...Each,
No. 368. Paper used is No. 167 Ivory Med. Size 18x24in...Each,



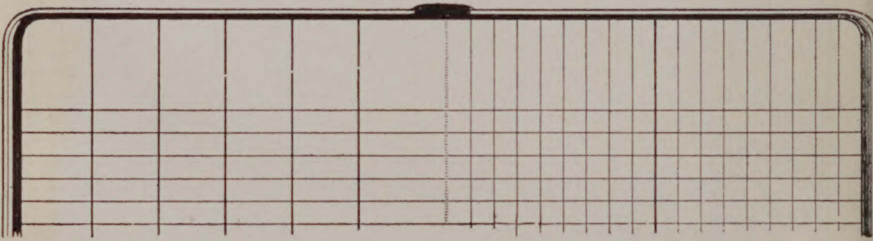
View of a Part of Our City Salesrooms

ENGINEERS' FIELD BOOKS

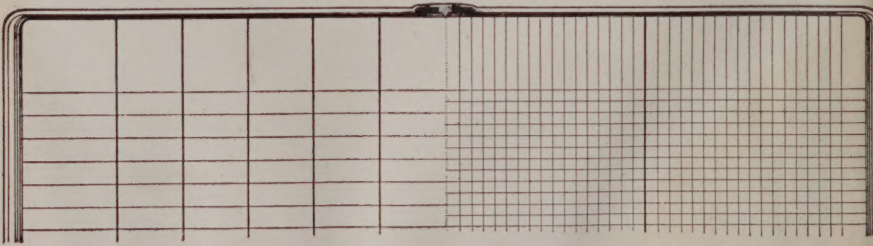
All field and cross-section books are bound in two styles of binding—genuine buff leather and in first-grade fabrikoid, a waterproof material that will wear as well as leather. The ruling is done with waterproof ink.



No. 380.	Level	book,	4½x7¼	inches,	80	leaves,	leather binding
380F.	"	"	" "	"	80	"	fabrikoid binding
380A.	"	"	4 x6½	"	80	"	leather binding
380AF.	"	"	4 x6½	"	80	"	fabrikoid binding
381.	"	"	4½x7¼	"	60	"	leather binding
381F.	"	"	" "	"	60	"	fabrikoid binding



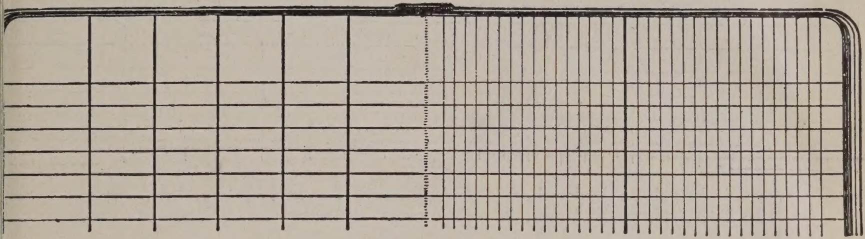
No. 382.	Field	book,	4½x7¼	inches,	80	leaves,	leather binding
382F.	"	"	" "	"	80	"	fabrikoid binding
383.	"	"	" "	"	60	"	leather binding
383F.	"	"	" "	"	60	"	fabrikoid binding



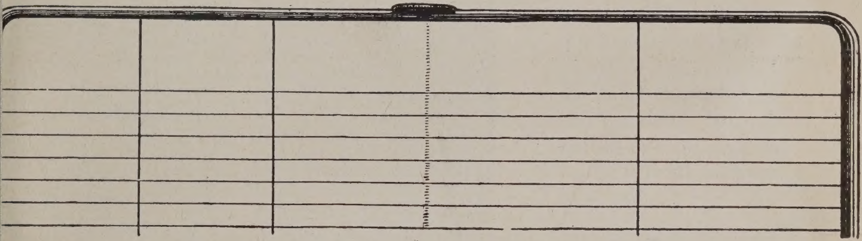
No. 384.	Mining	Transit	book,	4½x7¼	inches,	80	leaves.	leather binding
384F.	"	"	"	" "	"	80	"	fabrikoid binding

ENGINEERS' FIELD BOOKS

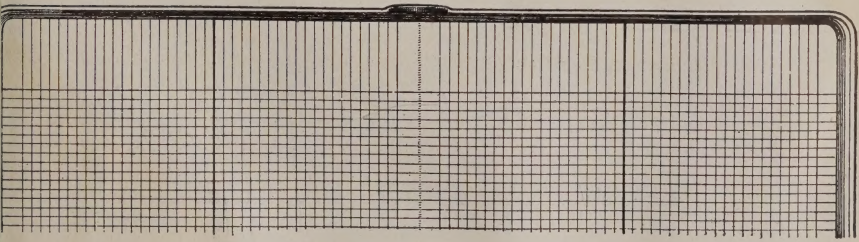
Our field books are made from the best ledger stock and bound so that they will open perfectly flat. Post's field books all contain standard tables, suitable for the work for which the book is intended.



No. 385. Field book, 4½x7¼ inches, 80 leaves, leather binding
385F. " " " " " 80 " fabrikoid binding
385½. " " " " " 36 " paper binding
386. " " " " " 60 " leather binding
386F. " " " " " 60 " fabrikoid binding

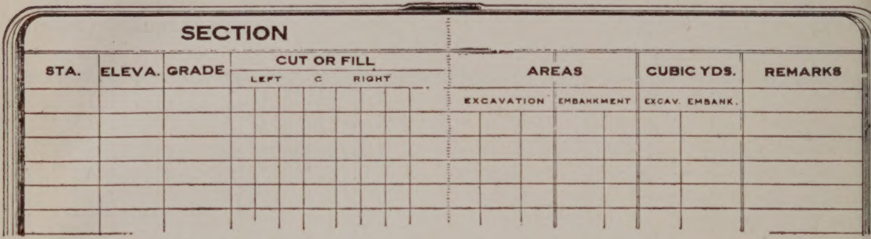


No. 390. Transit book, 4½x7¼ inches, 80 leaves, leather binding
390F. " " " " " 80 " fabrikoid binding
391. " " " " " 60 " leather binding
391F. " " " " " 60 " fabrikoid binding



No. 395. Cross Section Book, 5¼x7½ inches, 80 leaves, leather binding
395F. " " " " " " 80 " fabrikoid binding
396. " " " 6½x8½ " 80 " leather binding
396F. " " " " " " 80 " fabrikoid binding

ENGINEERS' FIELD BOOKS



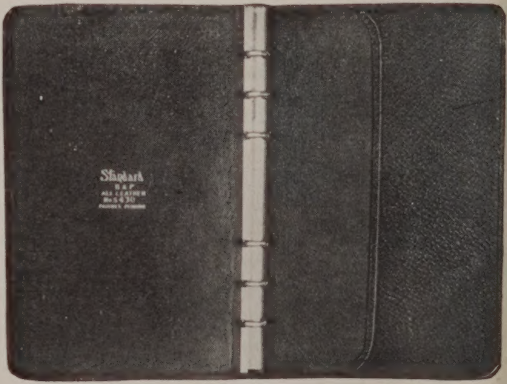
SECTION											
STA.	ELEVA.	GRADE	CUT OR FILL			AREAS		CUBIC YDS.		REMARKS
			LEFT	C	RIGHT	EXCAVATION	EMBANKMENT	EXCAV.	EMBANK.	

No. 400. Earthworks book, 5¼x8 inches, 80 leaves, leather binding
400-F. Earthworks book, 5¼x8 inches, 80 leaves, fabrikoid binding
No. Tables in Earthworks Books

ENGINEERS' LOOSE LEAF FIELD BOOKS

The covers are made in three styles—Leather, Fabri-Hide and Cloth covered, both stiff and flexible, except the No. 405 which is carried in stiff only.

Size of covers, 7¾x5 inches.



LOOSE LEAF FIELD BOOK COVERS

Each

No. 401. Leather (Stiff Cover), 6 rings, holds 100 sheets.........
402. Leather (Flexible Cover), 6 rings, holds 100 sheets......
403. Imitation Leather (Stiff Cover), 6 rings, holds 100 sheets
404. Imitation Leather (Flexible Cover), 6 rings, holds 100 sheets ....
405. Cloth Transfer Binder (Stiff Cover), 6 rings, holds 200 sheets ....

LOOSE LEAF SHEETS OR FILLERS

For 6-Ring Cover

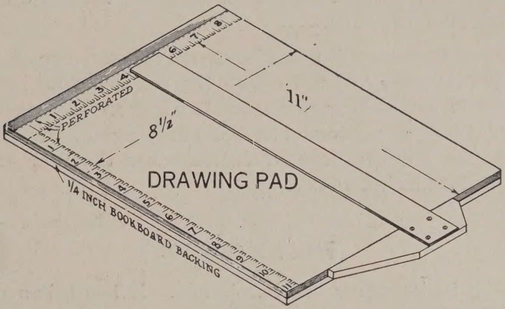
Each

No. 406. Level book sheets, same ruling as No. 380..............
407. Field book sheets, same ruling as No. 382..............
408. Mining Transit book sheets, same ruling as No. 384......
409. Field Book sheets, same ruling as No. 385..............

DRAWING PAD OUTFIT

LETTER SIZE

For Architects, Engineers, Salesmen and Schools



"DRAWINGPAD" Sheets have scale divided six and eights parts to the inch and perforations along top and right side. **Convenient for drawing and tabulating. No thumb tack required.** Standard size 8½x11-inch sheet remains after perforated edges have been removed. Pad is securely glued and cloth bound at top and is attached to board by four small tacks through backing; when used up, remove backing and tack on new pad.

BOARD is of lightweight composition material, 9x12 in.; will not warp. Rubber cushion at each corner.

CELLULOID TEE-SQUARE: Blade is one piece, transparent-celluloid, 11½x1¼ in.; head is ebony, 5½ inches long, 5/16 inch thick.

MAPLE TEE-SQUARE: Blade is one piece, polished maple, 11½x1¼ in.; head is maple, 5½ inches long, ¼ inch thick.

COMPLETE OUTFITS

		Each	Dozen
No. 500.	Outfit, Drawing Paper Pad, Celluloid Tee-Square		
501.	Outfit, Drawing Paper Pad, Maple Tee-Square . .		
502.	Outfit, Tracing Paper Pad, Celluloid Tee-Square.		
503.	Outfit, Tracing Paper Pad, Maple Tee-Square. . .		

EXTRA PADS

		Each	Dozen
No. 504.	Drawing Paper Pad		
505.	Tracing Paper Pad		

POST'S DRAWING INSTRUMENTS

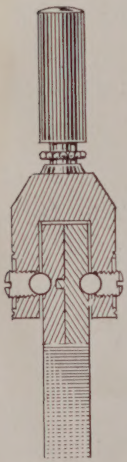
Our long experience in manufacturing and selling Drawing Instruments enables us to present a line which will meet every requisite of the American engineer, draftsman and student.

These instruments are all manufactured in our own factory, which is located in a peaceful valley of the Alps—the center of an industrious people who have been making Drawing Instruments for more than one hundred years. Here are found ideal conditions for the carrying on of such an industry, making possible the manufacture of Instruments that far excel any others being offered on the market today.

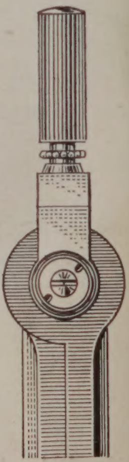
PRIMO GRADE

Post's **PRIMO** Instruments are handmade. It has taken more than three generations to develop the artistic skill and painstaking precision necessary to make **PRIMO** Instruments. Their unfailing accuracy, elegant finish and unsurpassed workmanship, together with the high grade of cold-rolled German silver and tool steel incorporated in each Instrument, has made them a standard throughout the world.

The commonly found Straightening Device does not appear on the Primo Compass and Divider, as to do so would impair the perfect balance and harmonious workings of the component parts.



The patent Ball Pivot, as illustrated, is rigidly built to give the maximum ease and smoothness of motion with the minimum amount of weight. The head of one of the legs has an exceptionally hard pivot fitting into an equally hard socket in the head of the remaining leg. Between these heads and the fork are ball pivots kept in place by screws. These ball pivots keep the legs securely in any position and reduce the joint friction to a minimum. By loosening or tightening the screws, the pressure between the heads can be adjusted to the desire of the draftsman. Every part of this joint is designed for long wear, yet can easily be replaced at any time if desired.



The Jack-knife Ruling Pens used in the Primo Sets have a hinged upper blade, controlled in exactly the same manner as the blade of a pen knife, with a spring holding the blade either at an angle of 90° or keeping it firmly at any desired distance from the fixed blade of the pen. Opening the pen for cleaning will not alter the adjustment for the width of lines.

CORONA GRADE

The very best "flat-type" Drawing Instruments. Their workmanship is of the best and their beautiful finish upon cold-rolled German Silver and Tool Steel makes them the leading instruments of their kind.

The unusual reliability of the Compasses and Dividers is due to the special construction of the Ball Joint and Straightening Device.

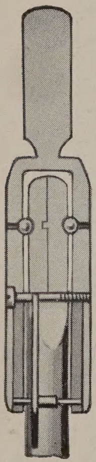


Figure A

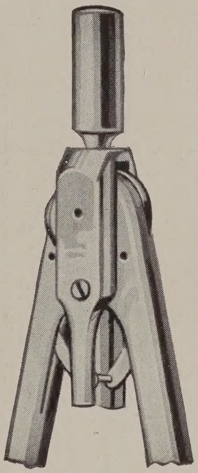


Figure B

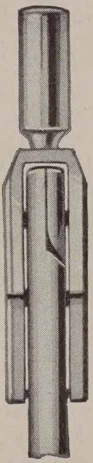


Figure C

The legs move with great ease and little friction, yet any radius is held true and steady for any desired length of time.

Figure A illustrates the working parts of the Corona Ball Joint. The smooth-working pivot point and socket, as shown between the heads of the legs, is retained in place by two anti-friction ball pivots upon which tension is easily regulated by means of adjusting screw.

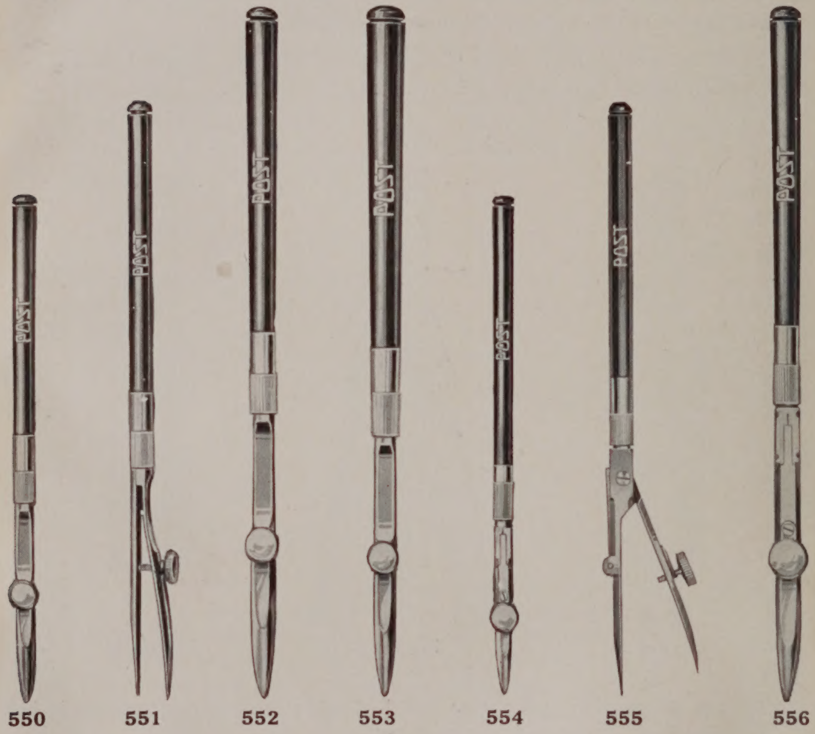
Figures B and C illustrate the Straightening Device which keeps the handle perpendicular to the paper, irrespective of the distance between legs.

Post's Patent Hairspring Adjustment makes possible a perfect setting of compass and divider. It differs from those of other instruments in that the spring is obtained by a cut running along the length of the leg, thus making the entire adjustment an actual part of the unit and insuring a life-long service to the user.

PRIMO INSTRUMENTS

RULING PENS

Each Instrument Stamped Post's PRIMO


POST
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552
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556

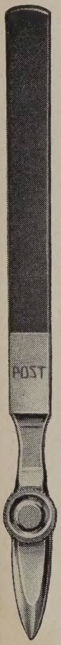
		Each
No. 550.	Ruling Pen, Spring Blade, Ebony Handle, 4½-inch.......	
551.	" " " " " " 5 "	
552.	" " " " " " 5½ "	
553.	" " " " Large Ebony Handle, 5½-inch.	
554.	" " Knife Spring, Ebony Handle, 4½-inch.......	
555.	" " " " " " 5 "	
556.	" " " " " " 5½ "	

The opening of our Jack-knife Ruling Pen for cleaning does not change the adjustment for width of line.

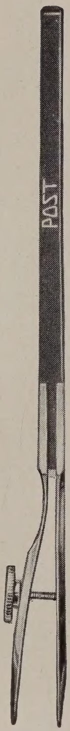
PRIMO INSTRUMENTS

RULING PENS

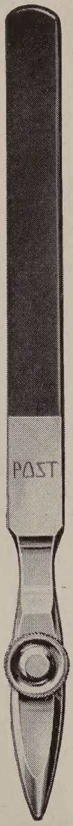
Each Instrument Stamped Post's" PRIMO



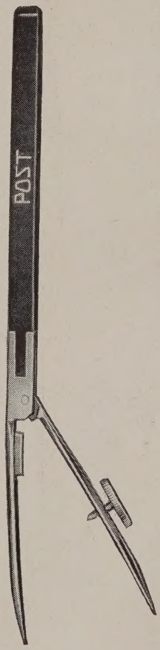
565



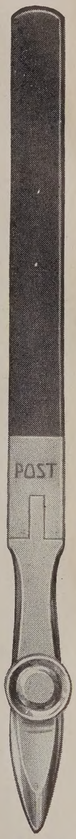
566



567



565A



567A

No.		Each
565.	Detail Ruling Pen, Spring Blade, 5-inch	
566.	“ “ “ “ “ 6 “	
567.	“ “ “ “ “ 7 “	
565A.	“ “ “ Jack-knife Spring, 5-inch	
566A.	“ “ “ “ “ 6 “	
567A.	“ “ “ “ “ 7 “	

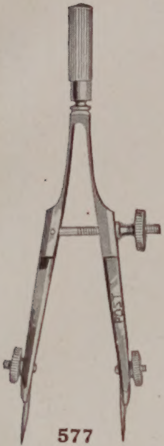
Above Pens Are Furnished with Ebony Handles

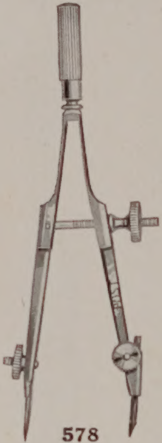
The opening of our Jack-knife Detail Pen for cleaning does not change the adjustment for width of line.

PRIMO INSTRUMENTS

BOW INSTRUMENTS

Each Instrument Stamped Post's **PRIMO**


577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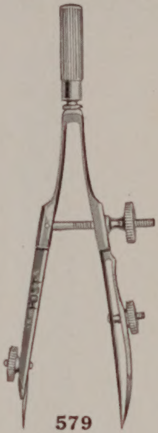
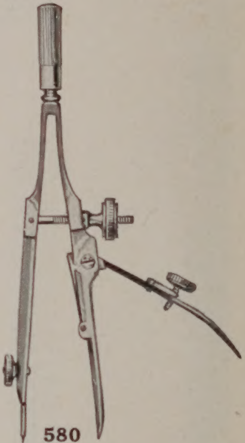
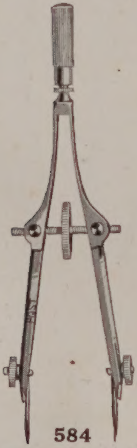

579


580

No. 577. Steel Spring Bow Divider, 3¼-inch, Side Screw.......... Each
578. " " " Pencil, 3¼-inch, Side Screw..........
579. " " " Pen, 3¼-inch, Side Screw.............
580. " " " Pen, 3¼-inch, with Jack-knife Spring, Side Screw......................................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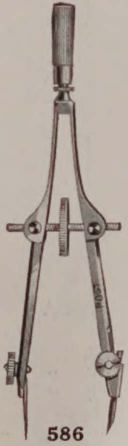
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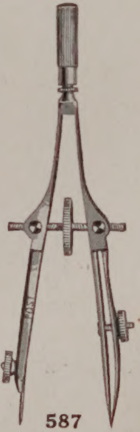
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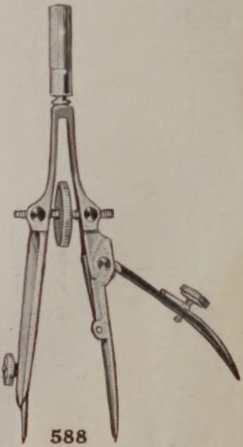
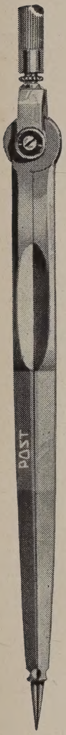

588

No. 584. Steel Spring Bow Divider, 3¼-inch, Center Screw........ Each
586. " " " Pencil, 3¼-inch, Center Screw.........
587. " " " Pen, 3¼-inch, Center Screw...........
588. " " " Pen, 3¼-inch, with Jack-knife Spring, Center Screw.....................................

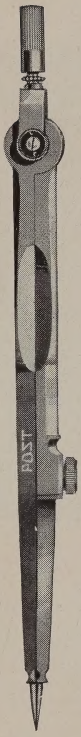
PRIMO INSTRUMENTS

COMPASSES AND DIVIDERS

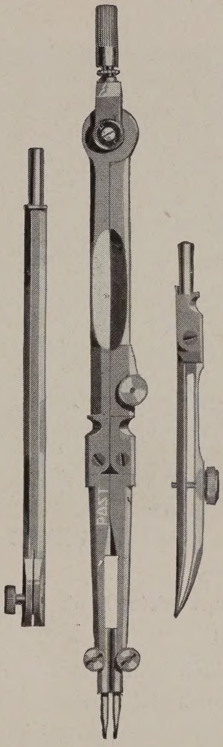
Each Instrument Stamped Post's PRIMO



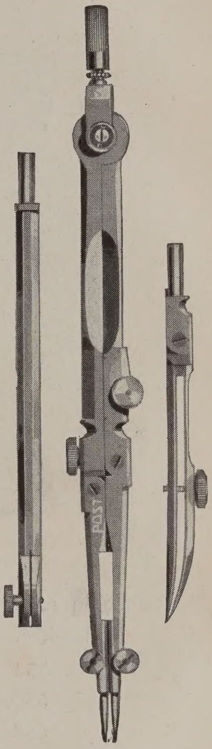
593



596



611



612

No.		Each
No. 593.	Plain Divider, 6-inch	
596.	Hairspring Divider, 6-inch	
611.	Compass, 6-inch, with two needle points, lengthening bar and interchangeable pencil and pen parts	
611A.	Compass, 6-inch, same as No. 611, but with jack-knife spring pen part	
612.	Compass, 6-inch, same as No. 611, but with hairspring	
612A.	Compass, 6-inch, same as No. 612, but with jack-knife spring pen part	

PRIMO INSTRUMENTS

Each Instrument Stamped Post's PRIMO

No. 628 **PRIMO**

Per Set

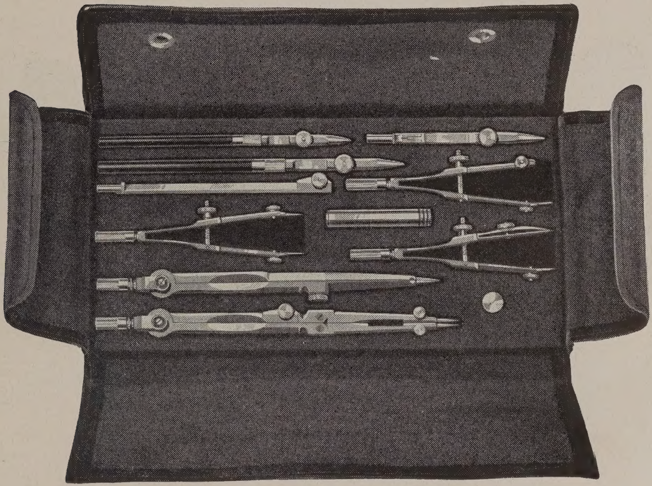
No. 628. Genuine Leather Pocket Book Style Case, silk velvet lined, containing:

No. 554. 5 -inch Ruling Pen
555. 5½-inch Ruling Pen
584. 3¼-inch Steel Bow Divider
586. 3¼-inch Steel Bow Pencil
588. 3¼-inch Steel Bow Pen
596. 6 -inch Hairspring Divider
612A. 6 -inch Compass, with two needle points, lengthening bar and interchangeable pencil and pen parts, Center Tack and Lead Box.

No. 628S. Genuine Leather Pocket Book Style Case, silk velvet lined, containing same assortment as No. 628, but with Steel Spring Side Screw Bows, Nos. 577, 578 and 580, in place of Nos. 584, 586 and 588, and with Compass No. 611A, in place of No. 612A........................

PRIMO INSTRUMENTS

Each Instrument Stamped Post's PRIMO



No. 630S **PRIMO**

Per Set

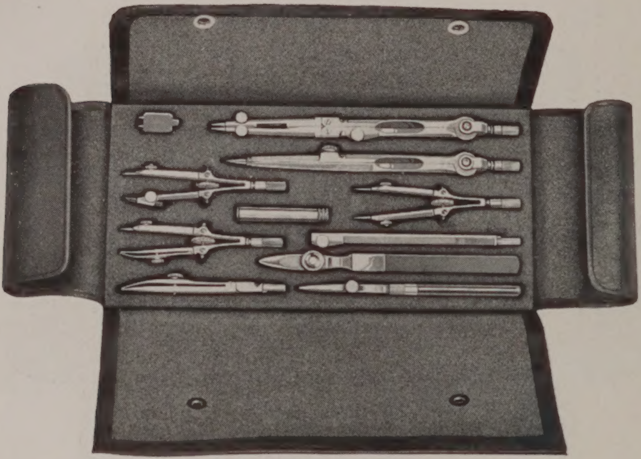
No. 630. Genuine Leather Pocket Book Style Case, silk velvet lined, containing:

No. 550. 4½-inch Ruling Pen
553. 5½-inch Ruling Pen
584. 3¼-inch Steel Bow Divider
586. 3¼-inch Steel Bow Pencil
587. 3¼-inch Steel Bow Pen
596. 6 -inch Hairspring Divider
611. 6 -inch Compass, with two needle points, lengthening bar, interchangeable pencil and pen parts, Center Tack and Lead Box.

No. 630S. Genuine Leather Pocket Book Style Case, silk velvet lined, containing same assortment as No. 630, but with Steel Spring Side Screw Bows Nos. 577, 578 and 579, in place of Nos. 584, 586 and 587.

PRIMO INSTRUMENTS

Each Instrument Stamped Post's PRIMO



No. 631 **PRIMO**

Per Set

No. 631. Genuine Leather Pocket Book Style Case, silk velvet lined, containing:

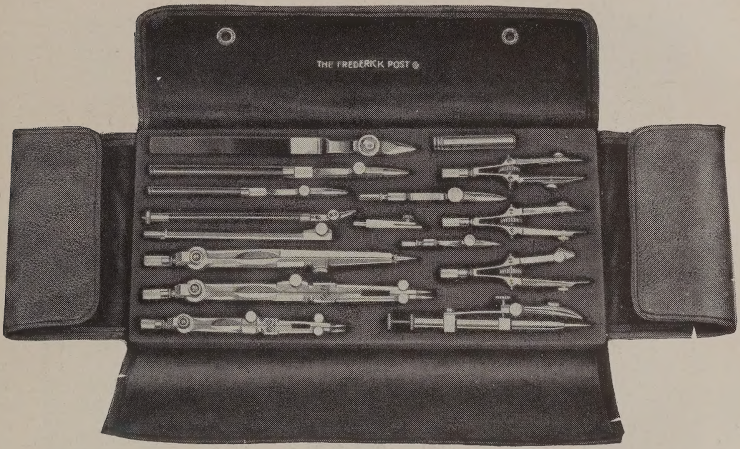
No. 550. 4½-inch Ruling Pen
565. 5 -inch Detail Pen
584. 3¼-inch Steel Bow Divider
586. 3¼-inch Steel Bow Pencil
587. 3¼-inch Steel Bow Pen
596. 6 -inch Hairspring Divider
611. 6 -inch Compass, with two needle points, lengthening bar, interchangeable pencil and pen parts, Center Tack and Lead Box.

Per Set

No. 631S. Genuine Leather Pocket Book Style Case, silk velvet lined, containing same assortment as No. 631, but with Steel Spring Side Screw Bows Nos. 577, 578 and 579, in place of Nos. 584, 586 and 587.

PRIMO INSTRUMENTS

Each Instrument Stamped Post's **PRIMO**



No. 638 **PRIMO**

Per Set

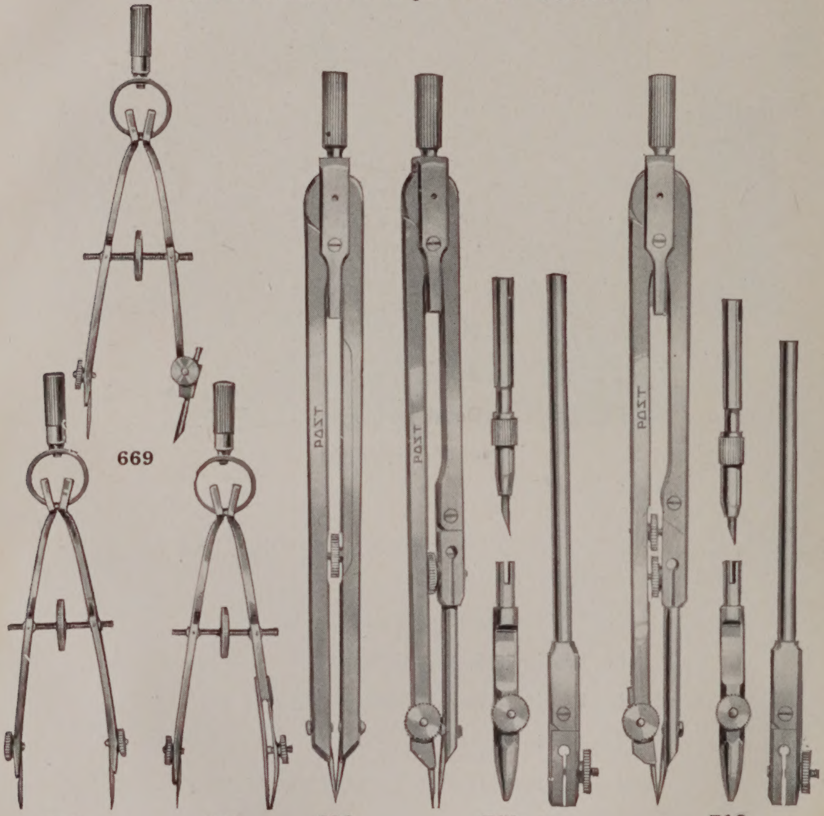
No. 638. Genuine Leather Pocket Book Style Case, silk velvet lined, containing:

No. 550. 4½-inch Ruling Pen
553. 5½-inch Ruling Pen
565. 5 -inch Detail Ruling Pen
817. 4¾-inch Curve Pen
584. 3¼-inch Center Screw Bow Divider
586. 3¼-inch Center Screw Bow Pencil
587. 3¼-inch Center Screw Bow Pen
888. 5 -inch Drop Bow Pen with pencil part
596. 6 -inch Hairspring Divider
611. 6 -inch Compass with lengthening bar, pen and pencil parts
613. 4 -inch Compass with pen and pencil parts
Center Tack and Lead Box

CORONA INSTRUMENTS

COMPASSES, DIVIDERS AND BOW INSTRUMENTS

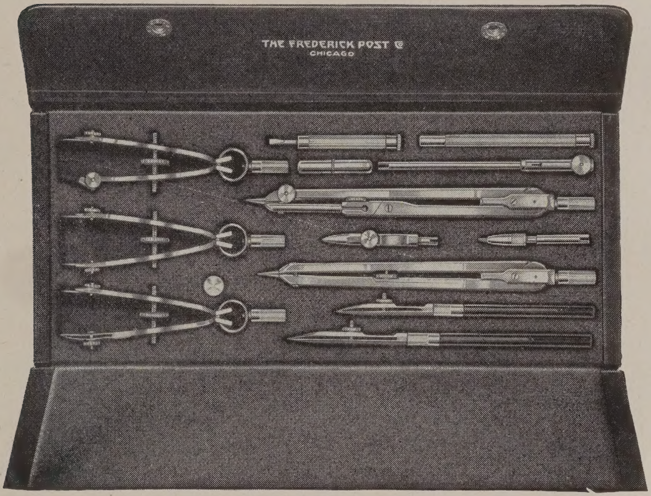
Each Instrument Stamped Post's **CORONA**



No.		Each
No. 668.	Circular Spring Bow Divider, 3½-inch, Center Screw.....	
669.	Circular Spring Bow Pencil, 3½-inch, Center Screw......	
670.	Circular Spring Bow Pen, 3½-inch, Center Screw........	
696.	Hairspring Divider, 6-inch	
711.	Compass, 6-inch, with two needle points, lengthening bar, straightening device and interchangeable pencil and pen parts	
712.	Compass, 6-inch, same as No. 711, but with Hairspring....	

CORONA INSTRUMENTS

Each Instrument Stamped Post's **CORONA**



No. 728 **CORONA**

Per Set

No. 728. Genuine Leather Pocket Book Style Case, silk velvet lined, containing:

No. 550. 4½-inch Ruling Pen
552. 5½-inch Ruling Pen
668. 3½-inch Circular Bow Divider
669. 3½-inch Circular Bow Pencil
670. 3½-inch Circular Bow Pen
696. 6 -inch Hairspring Divider
711. 6 -inch Compass with two needle points, lengthening bar and interchangeable pencil and pen parts.

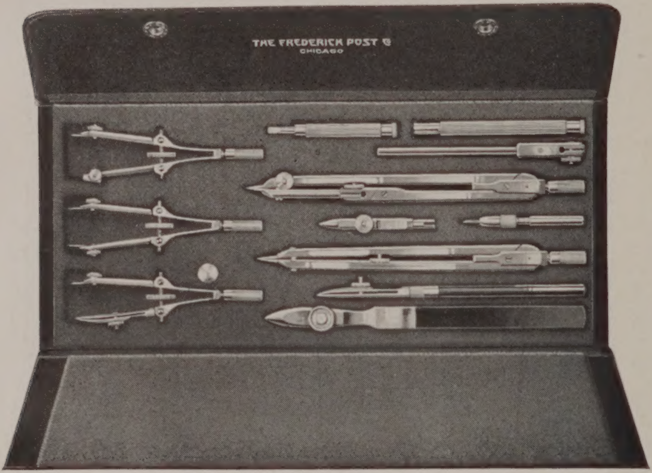
Metal Handle, extra needle points, Combination Key and Lead Box..

No. 728A. Genuine Leather Pocket Book Style Case, silk velvet lined, containing same parts as No. 728 but with Steel Center Screw Bows Nos. 874, 875 and 876, instead of Nos. 668, 669 and 670 ....

No. 728B. Genuine Leather Pocket Book Style Case, silk velvet lined, containing same parts as No. 728, but with Steel Side Screw Bows Nos. 870, 871 and 872, instead of Nos. 668, 669 and 670 ....

CORONA INSTRUMENTS

Each Instrument Stamped Post's **CORONA**



No. 734A **CORONA**

Per Set

No. 734. Genuine Leather Pocket Book Style Case, silk velvet lined, containing:

- No. 551. 5 -inch Ruling Pen
- 566. 6 -inch Detail Pen
- 668. 3½-inch Circular Bow Divider
- 669. 3½-inch Circular Bow Pencil
- 670. 3½-inch Circular Bow Pen
- 696. 6 -inch Hairspring Divider
- 711. 6 -inch Compass with two needle points, lengthening bar and interchangeable pencil and pen parts

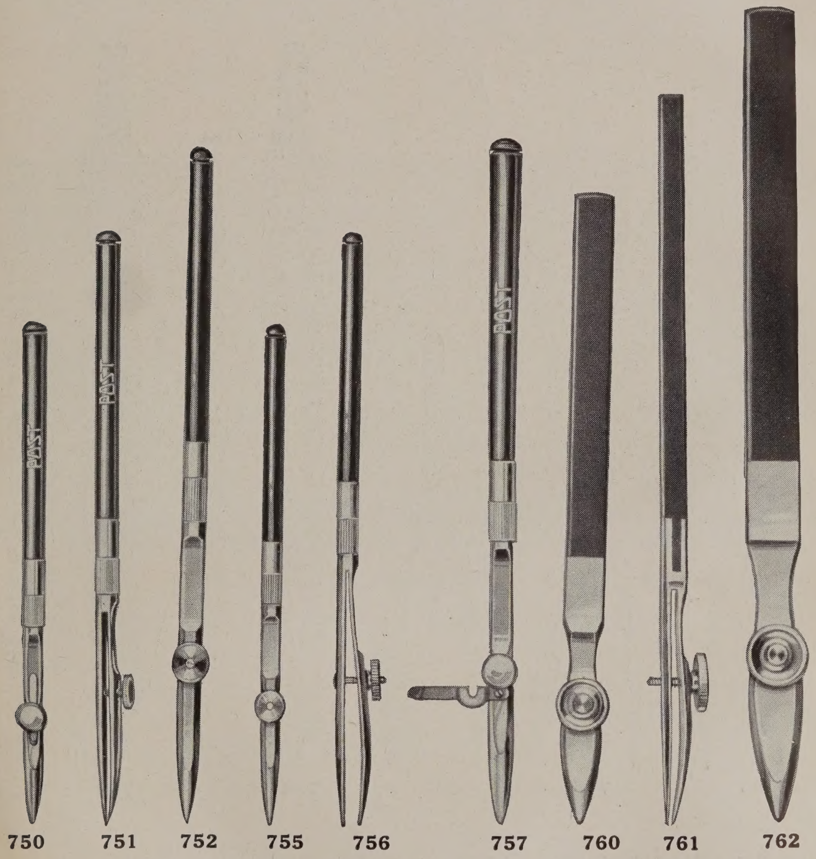
Metal Handle, extra needle points, Combination Key and Lead Box..

No. 734A. Genuine Leather Pocket Book Style Case, silk velvet lined, containing same parts as No. 734, but with Steel Center Screw Bows Nos. 874, 875 and 876, instead of Nos. 668, 669 and 670 ....

No. 734B. Genuine Leather Pocket Book Style Case, silk velvet lined, containing same parts as No. 734, but with Steel Side Screw Bows Nos. 870, 871 and 872, instead of Nos. 668, 669 and 670 ....

GENUINE KERN SWISS INSTRUMENTS

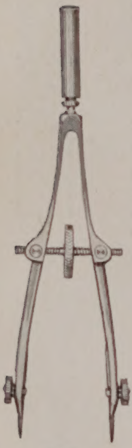
Each Instrument Stamped Kern Swiss


POST
POST
POST
750
751
752
755
756
757
760
761
762

		Each
No. 750.	Ruling Pen, Spring Blade, Ebony Handle, 4½-inch.......	
751.	" " " " " " 5 "	
752.	" " " " " " 5½ "	
755.	" " " " " " with release, 4½ inches	
756.	Ruling Pen, Spring Blade, Ebony Handle, with release, 5 in.	
757.	Ruling Pen, Spring Blade, Ebony Handle, with release, 5½ inches	
760.	Detail Ruling Pen, Spring Blade, 5-inch................	
761.	" " " " " 6 "	
762.	" " " " " 7 "	

GENUINE KERN SWISS INSTRUMENTS

Each Instrument Stamped Kern Swiss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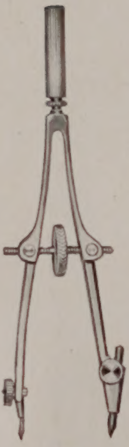
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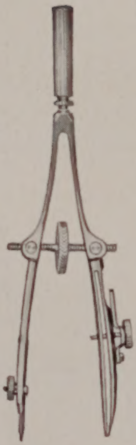
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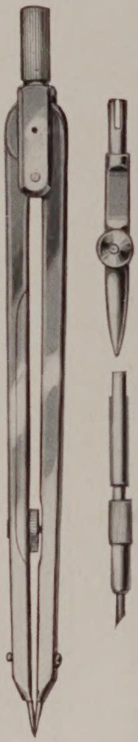
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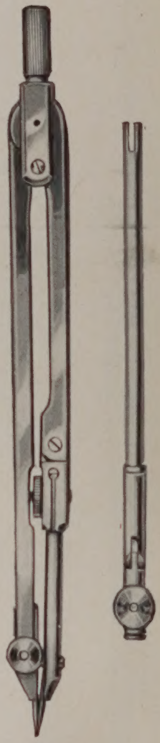

769

Each

No. 765. Steel Spring Bow Divider, 4 inches, Center Screw........

766. Steel Spring Bow Pencil, 4 inches, Center Screw.........

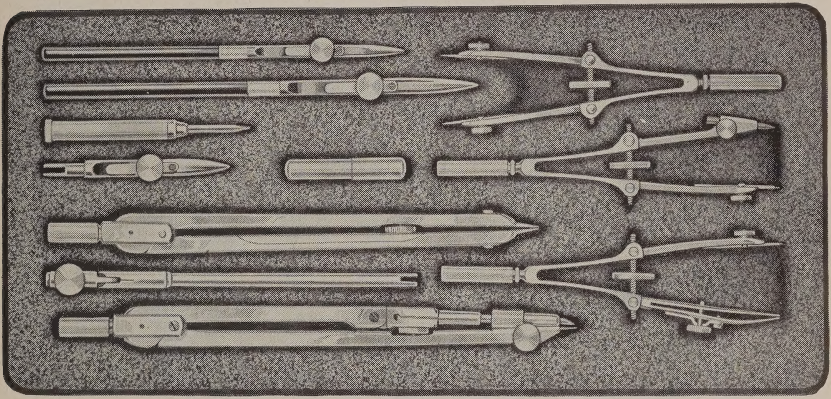
767. Steel Spring Bow Pen, 4 inches, Center Screw...........

768. Hairspring Divider, 6-inch...........................

769. Compass with lengthening bar, interchangeable needle, pencil and pen parts, 6-inch..........................

GENUINE KERN SWISS INSTRUMENTS

Each Instrument Stamped Kern Swiss



No. 775. Kern

Per Set

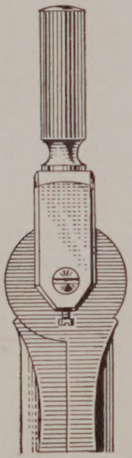
No. 775. Neat Morocco Bar Lock Style Case, containing:

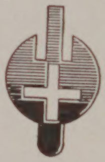
No. 755. 4½-inch Ruling Pen with release..............
757. 5½-inch " " " " ....
765. 4 -inch Steel Bow Divider...................
766. 4 " " " Pencil....................
767. 4 " " " Pen......................
768. 6 " Hairspring Divider...................
769. 6 " Compass with lengthening bar, interchangeable needle, pencil and pen parts........

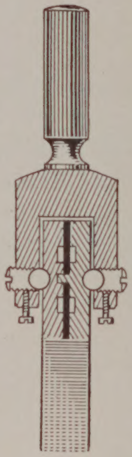
EXCELSIOR DRAWING INSTRUMENTS

Are made from selected German Silver and Tool Steel. Their unsurpassed workmanship, their wonderful finish and mechanical excellence, embodying all special features of great practical value to draftsmen, compel at once the admiration of all users.

The cross-section illustration shows at a glance the perfect workings of the pivot and its socket, the frictionless ball points and the adjustment of tension, thereby giving to the Excelsior Instruments that balance and smoothness of action so much sought after by today's draftsmen.







The straightening device is simply and effectively made by means of a specially constructed steel bushing placed between the heads of the two legs, which insures a perpendicular position of handle at all times and adds many years to the life of divider and compass.

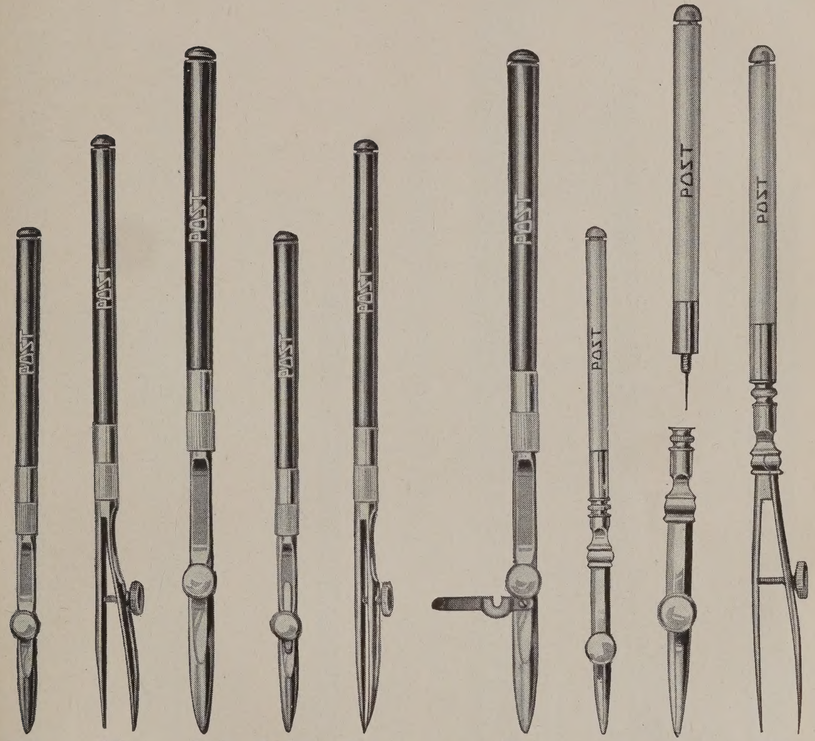
The Ruling Pens have long, slightly arched nibs which have been thoroughly tempered to give added life to the points. This, together with the large ink capacity and the substitution of a screw adjustment in place of the bolt and nut type, makes the pen faultless in every respect.

We guarantee these instruments to be of exceptional quality, to satisfactorily perform the work for which they are intended and to give endless service through long years of constant use.

EXCELSIOR INSTRUMENTS

RULING PENS

Each Instrument Stamped Post's EXCELSIOR



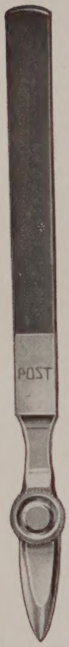
No.		Each
No. 800.	Ruling Pen, Spring Blade, Metal Handle, 4½-inch......	
801.	“ “ “ “ “ “ 5 “	
802.	“ “ “ “ “ “ 5½ “	
800A.	“ “ “ “ with release, Metal Handle, 4½-inch..	
801A.	Ruling Pen, Spring Blade, with release, Metal Handle, 5-inch..	
802A.	Ruling Pen, Spring Blade, with release, Metal Handle, 5½-inch..	
804.	Ruling Pen, with joint and pricker, Metal Handle, 4½-inch	
805.	“ “ “ “ “ “ “ “ 5 “	
806.	“ “ “ “ “ “ “ “ 5½ “	

Aluminum Handles can be supplied without extra charge on Nos. 800, 801, 802, 800A, 801A and 802A.

EXCELSIOR INSTRUMENTS

RULING PENS

Each Instrument Stamped Post's **EXCELSIOR**



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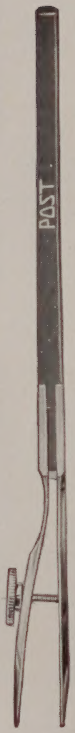
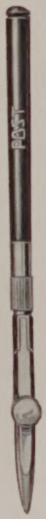


809

810



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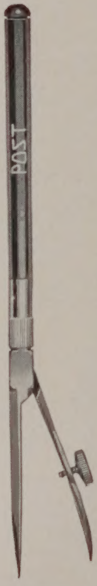

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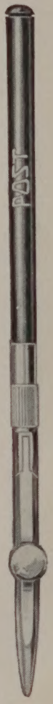


813

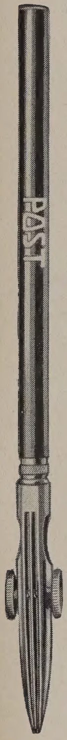
		Each
No. 808.	Detail Pen, Spring Blade, Metal Handle, 5-inch..........	
809.	" " " " " " 6 "	
810.	" " " " " " 7 "	
811.	Ruling Pen, Jack-knife Blade, Metal Handle, 4½-inch.....	
812.	" " " " " " " 5 "	
813.	" " " " " " " 5½ "	

Above pens with aluminum handles furnished at the same price.

EXCELSIOR INSTRUMENTS

RULING PENS

Each Instrument Stamped Post's **EXCELSIOR**



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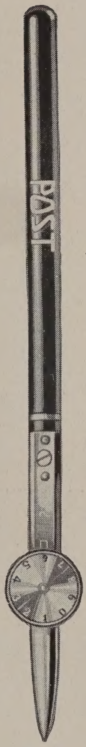

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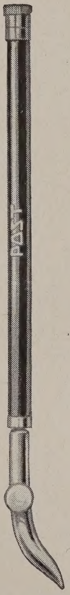

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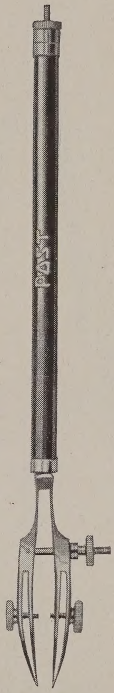

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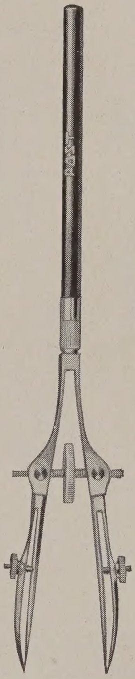

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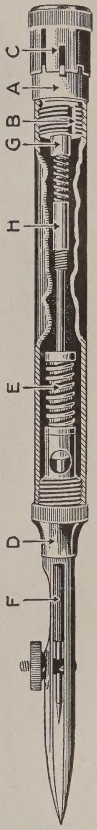


827

Each

No. 814. Border Ruling Pen, with Ebony Handle, 6¼-inch.........

815. Ruling Pen, with graduated thumb-screw, Ebony Handle, 5¾-inch..

817. Contour Pen, Swivel Socket, Metal Handle, 4¾-inch......

818. Railroad Pen, for straight or curved lines, regulated by screw at top of handle, Metal Handle, 5½-inch.........

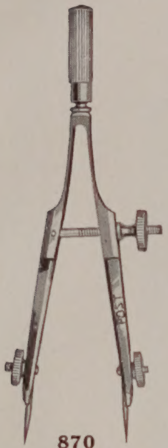
819. Railroad Pen, with center screw adjustment, Ebony Handle, 5½-inch..

827. Fountain Ruling Pen, hollow gutta-percha handle. One filling gives 8 hours fountain inking service. Easily filled. Non-leakable. Time-saving. 5½-inch.................

EXCELSIOR INSTRUMENTS

BOW INSTRUMENTS

Each Instrument Stamped Post's **EXCELSIOR**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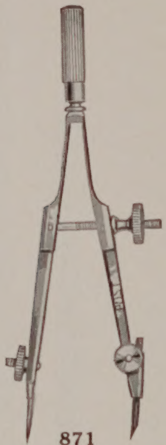
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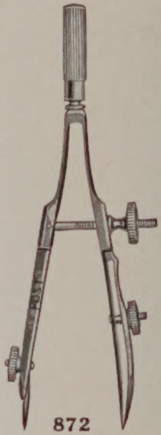
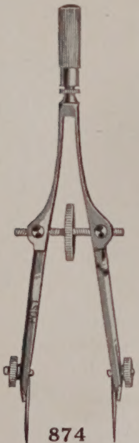

872

		Each
No. 870.	Steel Spring Bow Divider, 3½-inch, Side Screw........	
871.	" " " Pencil, 3½-inch, Side Screw..........	
872.	" " " Pen, 3½-inch, Side Screw............	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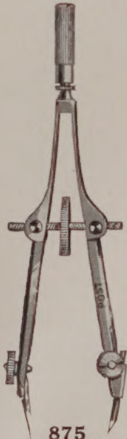
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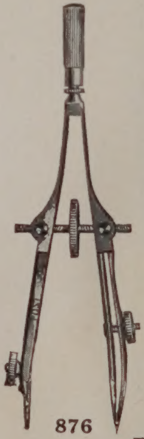
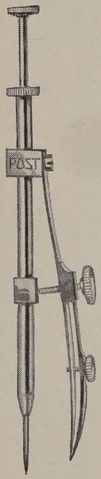

876

		Each
No. 874.	Steel Spring Bow Divider, 3½-inch, Center Screw......	
875.	" " " Pencil, 3½-inch, Center Screw........	
876.	" " " Pen, 3½-inch, Center Screw..........	

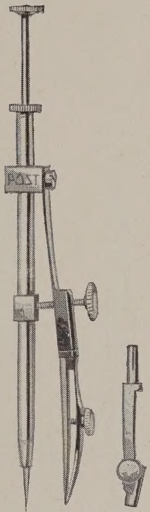
EXCELSIOR INSTRUMENTS

DROP BOW PENS

Each Instrument Stamped Post's EXCELSIOR



887



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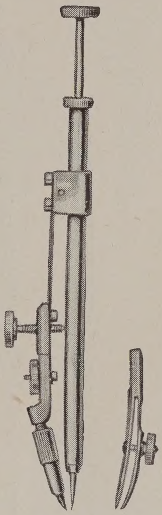

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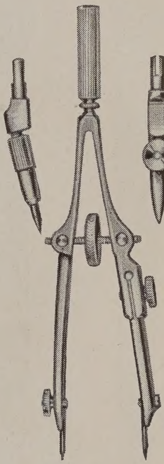


890

Each

No. 887. Drop Bow Pen, self-adjusting, 4½-inch. . . . .

888. Drop Bow Pen, with pencil part, self-adjusting, in velvet-lined case, 5-inch. . . . .

889. Kern Drop Bow Pen, with interchangeable pen and pencil parts, in case, 4½-inch. . . . .

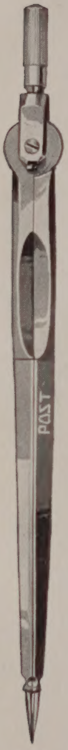
890. Kern Combination Bow, with interchangeable needle, pen and pencil parts, in case, 4½-inch. . . . .

These Drop Bow Instruments are unsurpassed for drawing small circles. They are furnished with extra long needle points.

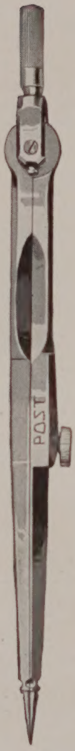
EXCELSIOR INSTRUMENTS

COMPASSES AND DIVIDERS

Each Instrument Stamped Post's **EXCELSIOR**



893



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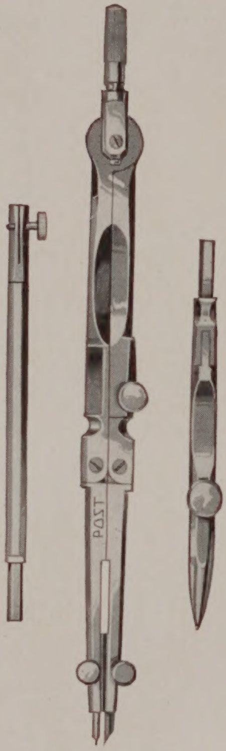

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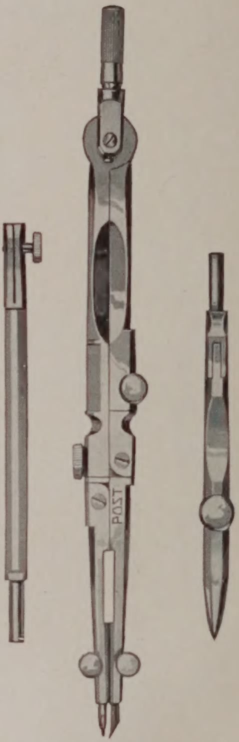


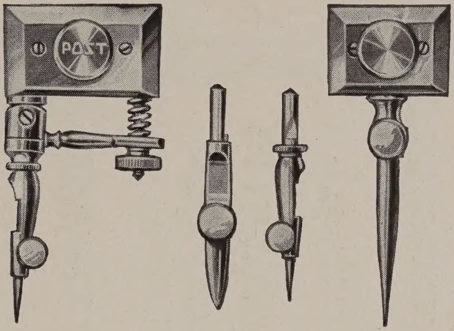
912

	Each
No. 893. Plain Divider, 6-inch	
896. Hairspring Divider, 6-inch	
911. Compass, with fixed needle points, lengthening bar, straightening device and interchangeable pencil and pen parts, 6-inch	
912. Compass, same as No. 911 but with Hairspring, 6-inch	
913. Compass, same as No. 911 but 4-inch and without lengthening bar	

EXCELSIOR INSTRUMENTS

BEAM COMPASSES

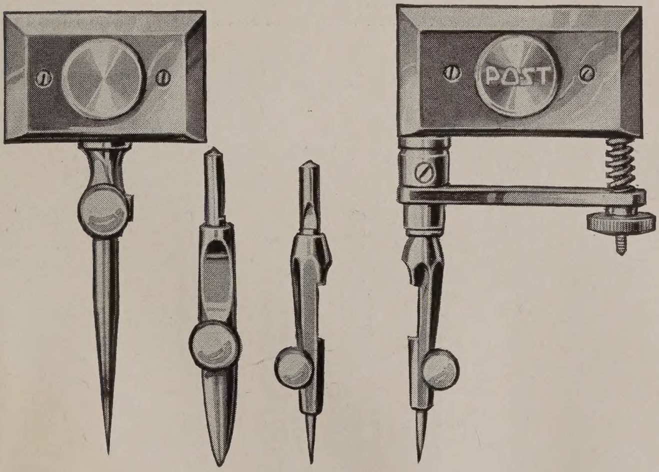
Each Instrument Stamped Post's EXCELSIOR



916

Each

No. 916. Miniature Beam Compass, with two steel points, pen, pencil and needle point and micrometer adjustment, in morocco velvet-lined case..



917

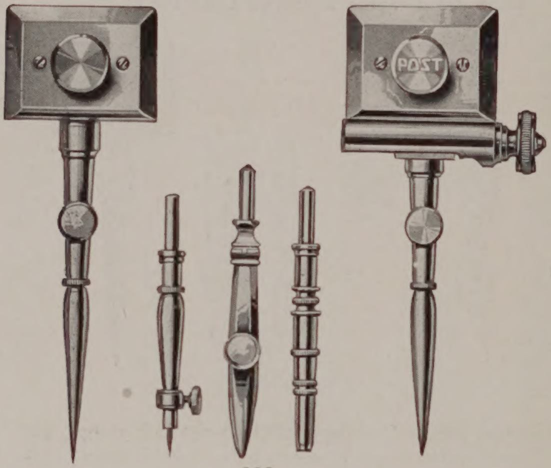
Each

No. 917. Beam Compass, to fit on any straight edge, with two needle points, interchangeable for lead, pen point and micrometer adjustment, in velvet-lined case......................

EXCELSIOR INSTRUMENTS

BEAM COMPASSES

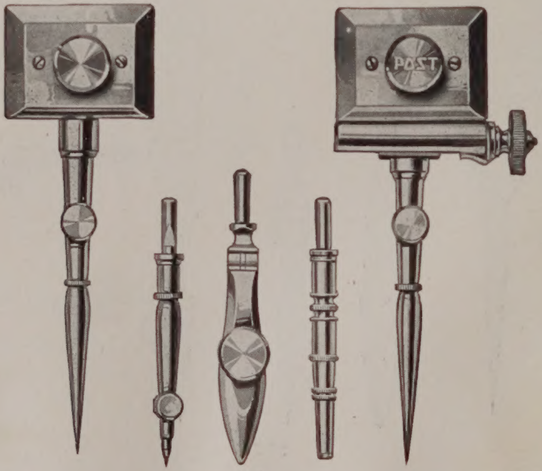
Each Instrument Stamped Post's **EXCELSIOR**



918

Each

No. 918. Beam Compass, with micrometer adjustment, two steel points, jointed pen part, pencil part and needle point, in velvet-lined case..



919

Each

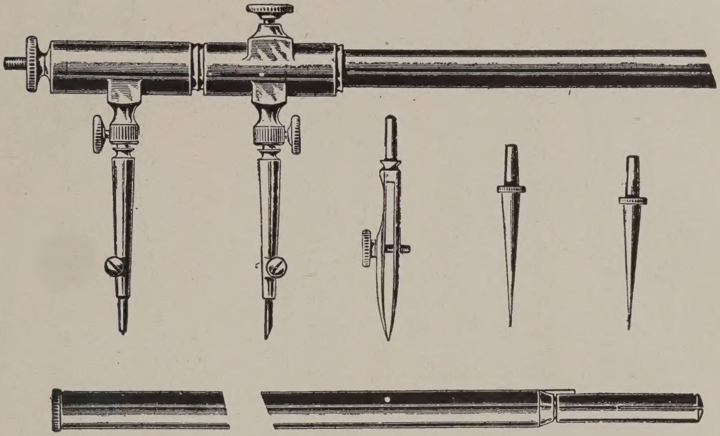
No. 919. Beam Compass, with micrometer adjustment, two steel points, jointed Swedish pen part, pencil part, in velvet-lined case ....

EXCELSIOR INSTRUMENTS

BEAM COMPASSES

Each Instrument Stamped Post's EXCELSIOR

Of Best German Silver, Highly Polished, with Steel Points



No. 920

Each

No. 920. Tubular Beam Compass, 2 round German silver bars, with two steel points, pen, pencil and needle point, in morocco case, 18-inch. . . . .

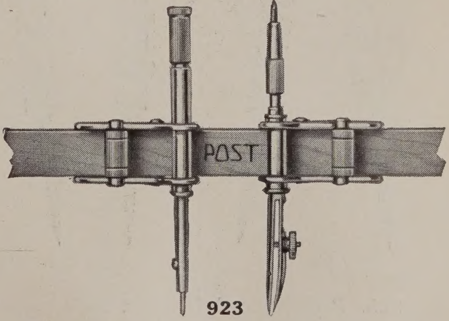
921. Tubular Beam Compass, 3 bars, in morocco case, 24-inch

922. Tubular Beam Compass, 4 bars, in morocco case, 36-inch

923. Beam Compass, easily adjustable, will draw circles from ¾″ to any larger diameter depending on the length of bar.

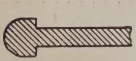
923A. Single Needle Point.

923C. Combined Needle and Pencil Part.

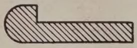


923

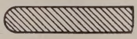
BARS FOR BEAM COMPASSES



No. 924 Style 1



No. 924 Style 2



No. 924 Style 3

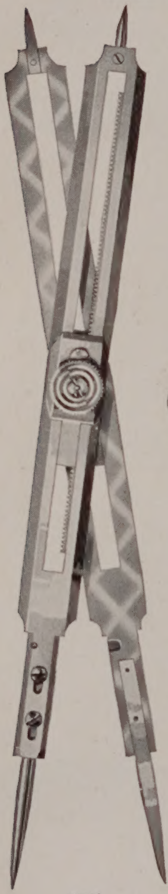
No. 924. Styles 1, 2 and 3, thickness $\frac{3}{16}$.

Size in inches. 24 30 36 42 48 60

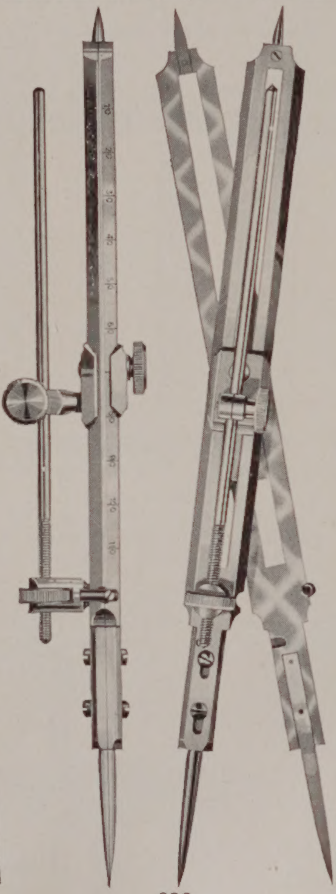
EXCELSIOR INSTRUMENTS

PROPORTIONAL DIVIDERS

Each Instrument Stamped Post's **EXCELSIOR**



925



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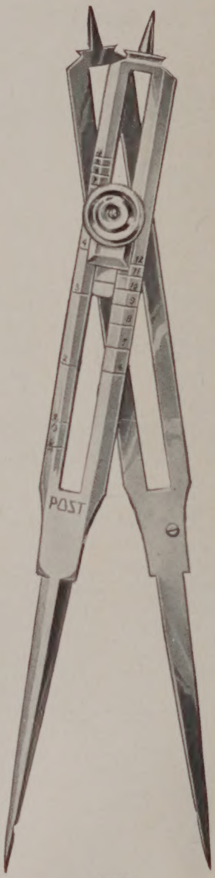


927

Each

No. 925. Proportional Divider, rack movement, with interchangeable and adjustable points, graduated for lines, circles, planes and solids, in velvet-lined case, 10-inch.................

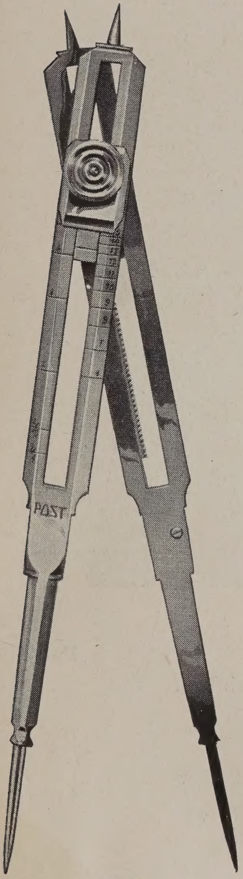
926. Proportional Divider, same as No. 925 but with micrometer adjustment, in velvet-lined case.........................

927. Proportional Divider, graduated for lines and circles, in velvet-lined case, 7¼-inch..........................

EXCELSIOR INSTRUMENTS

PROPORTIONAL DIVIDERS

Each Instrument Stamped Post's EXCELSIOR



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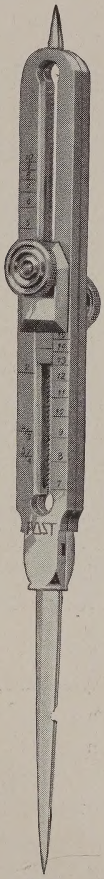
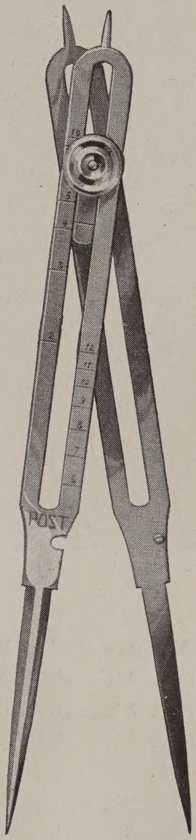
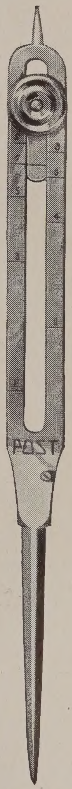


929



930



931

Each

No. 928. Proportional Divider, graduated for lines and circles, with rack movement, in velvet-lined case, 7¼-inch............

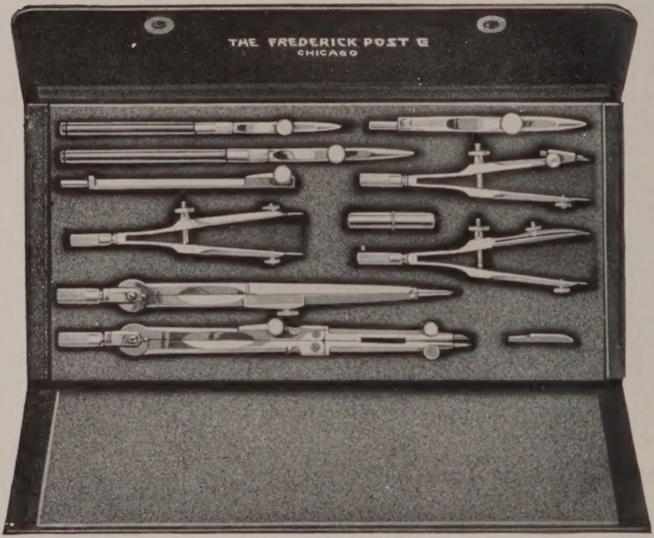
929. Proportional Divider, graduated for lines and circles, with rack movement, in velvet-lined case, 7-inch..............

930. Proportional Divider, graduated for lines and circles, in velvet-lined case, 7-inch.............................

931. Proportional Divider, brass, in velvet-lined case, 6¼-inch..

EXCELSIOR INSTRUMENTS

Each Instrument Stamped Post's EXCELSIOR



No. 947 **EXCELSIOR**

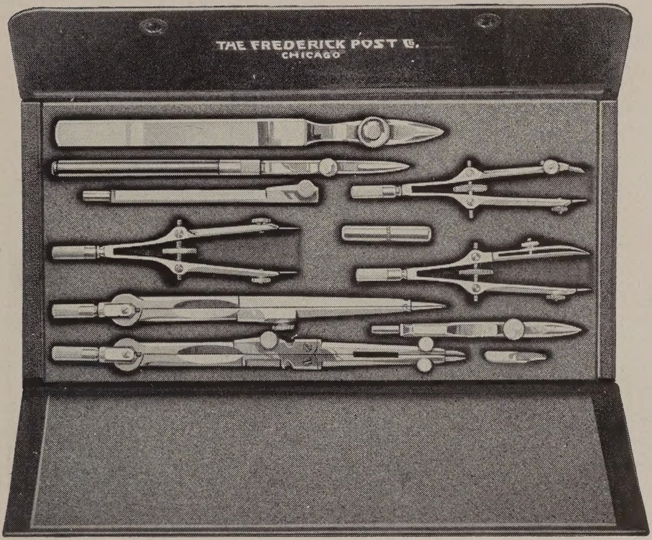
Per Set

No. 947. Fine Morocco Pocket Book Style Case, containing:
    No. 800. 4½-inch Ruling Pen
        802. 5½-inch Ruling Pen
        870. 3½-inch Steel Bow Divider, Side Screw
        871. 3½-inch Steel Bow Pencil, Side Screw
        872. 3½-inch Steel Bow Pen, Side Screw
        896. 6 -inch Hairspring Divider
        911. 6 -inch Compass with interchangeable needle points, lengthening bar, pen and pencil parts.
    Metal Screw Driver, extra needle points and Lead Box.....

No. 947C. Fine Morocco Pocket Book Style Case, containing same parts as No. 947, but with Center Screw Bows Nos. 874, 875 and 876, instead of Nos. 870, 871 and 872..........

EXCELSIOR INSTRUMENTS

Each Instrument Stamped Post's EXCELSIOR



No. 948C **EXCELSIOR**

Per Set

No. 948. Fine Morroco Pocket Book Style Case, containing:

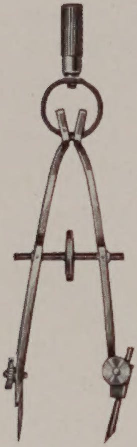
No. 801. 5 -inch Ruling Pen
809. 6 -inch Detail Pen
870. 3½-inch Steel Bow Divider, Side Screw
871. 3½-inch Steel Bow Pencil, Side Screw
872. 3½-inch Steel Bow Pen, Side Screw
896. 6 -inch Hairspring Divider
911. 6 -inch Compass with interchangeable needle points, lengthening bar, pen and pencil parts.

Metal Screw Driver, extra needle points and Lead Box...

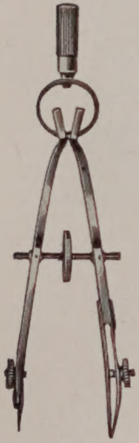
No. 948C. Fine Morocco Pocket Book Style Case, containing same parts as No. 948, but with Center Screw Bows Nos. 874, 875 and 876, instead of Nos. 870, 871 and 872.........

UNIVERSITY INSTRUMENTS

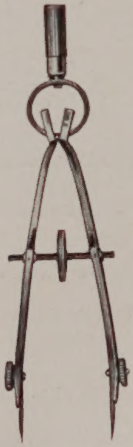
Each Instrument Stamped Post's **UNIVERSITY**



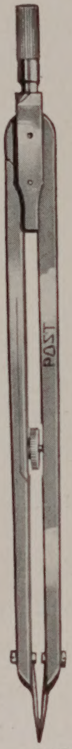
1009



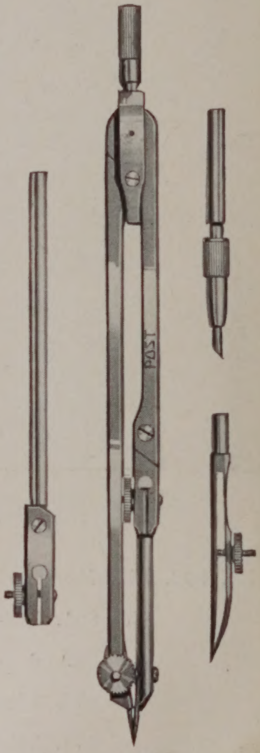
1010



1008



1013



1020

Each

No. 1008. Circular Spring Bow Divider, 3½-inch.................

1009. " " " Pencil, 3½-inch..................

1010. " " " Pen, 3½-inch....................

1013. Hairspring Divider with straightening device, 6-inch.....

1020. Compass, with removable needle point leg, divider part, pencil part, pen part and lengthening bar, with straightening device, 6-inch......................................

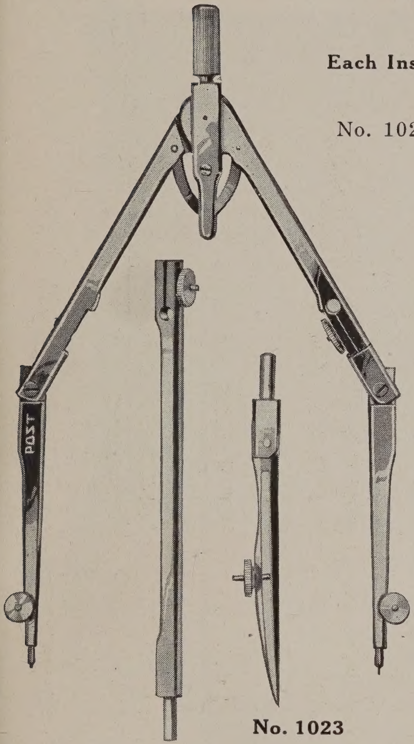
UNIVERSITY INSTRUMENTS

COMPASSES

Each Instrument Stamped Post's UNIVERSITY

No. 1023

No. 1023. Compass, with improved straightening device, both legs jointed, with lengthening bar and interchangeable needle, pencil and pen parts, 6-inch.



No. 1023

To simplify matters and to afford the busy buyer a handy and concise medium of reference, we have issued several catalogs supplemental to our General Catalog.

Each supplement contains only those items that are of interest to the individual buyer.

On the following pages we list, describe and illustrate supplies and equipment that come within the scope of

Universities, Technical Institutions,
Preparatory Schools and
Manual Training Schools

For all other Drawing Instruments and Materials, Surveying Instruments, Leveling Rods, Chains, Tapes, etc., refer to our General Catalog, a copy of which will be furnished on request.

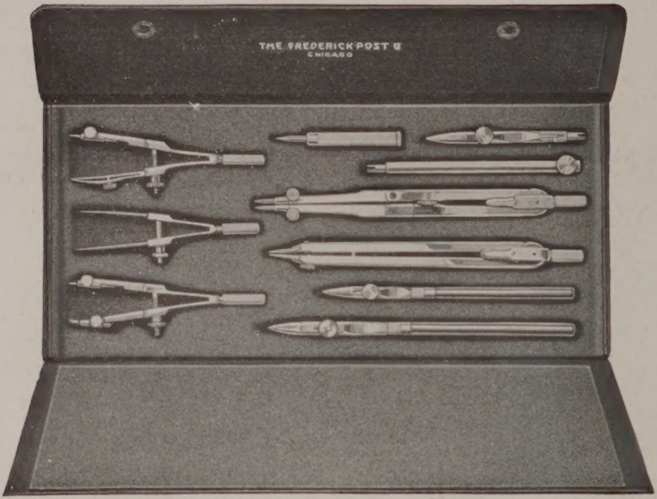
We call attention to pages 98 and 99 of this catalog, giving the diagram of a School Drafting Room Layout designed for a class of twenty (20) students, also a list of suggested equipment for same.

No. 1024. Compass, same as No. 1020 but 4-inch and without lengthening bar.

For Prices—See Separate Price-List

UNIVERSITY INSTRUMENTS

Each Instrument Stamped Post's UNIVERSITY



No. 1035-B **UNIVERSITY**

Per Set

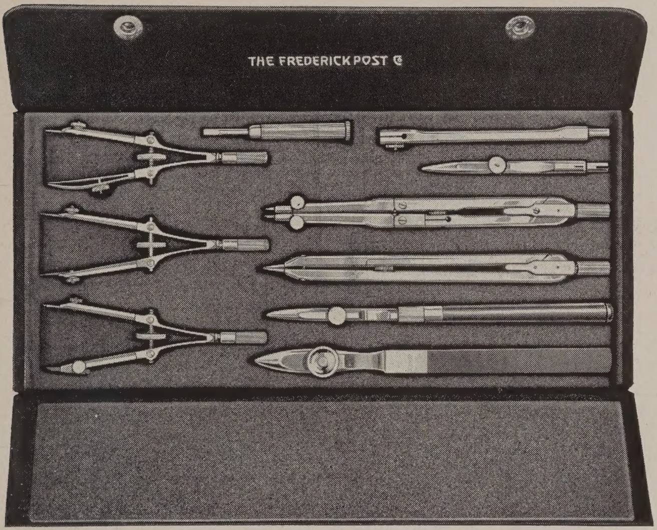
No. 1035. Pocket Book Style Case, containing:
- No. 800. 4½-inch Ruling Pen
- 553. 5½-inch Ruling Pen
- 1008. 3½-inch Circular Spring Bow Divider
- 1009. 3½-inch Circular Spring Bow Pencil
- 1010. 3½-inch Circular Spring Bow Pen
- 1013. 6 -inch Hairspring Divider
- 1023. 6 -inch Compass, with improved straightening device, both legs jointed, with lengthening bar and interchangeable needle, pencil and pen parts, combination key and lead box.

No. 1035A. Pocket Book Style Case, containing same parts as No. 1035, but with Center Screw Straight Steel Bows Nos. 874, 875 and 876 instead of Nos. 1008, 1009 and 1010.

No. 1035B. Pocket Book Style Case, containing same parts as No. 1035, but with Side Screw Straight Steel Bows Nos. 870, 871 and 872 instead of Nos. 1008, 1009 and 1010.

UNIVERSITY INSTRUMENTS

Each Instrument Stamped Post's UNIVERSITY



1036 A UNIVERSITY

Per Set,

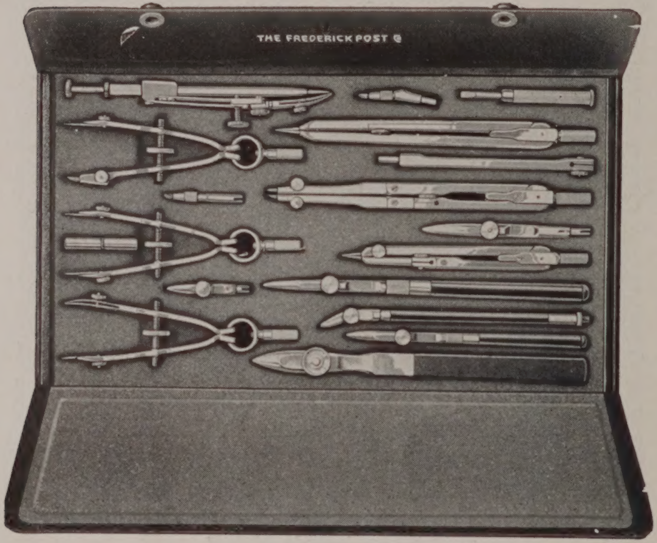
No. 1036. Pocket Book Style Case, containing:
- No. 809. 6 -inch Detail Pen
- 553. 5½-inch Ruling Pen
- 1008. 3½-inch Circular Spring Bow Divider
- 1009. 3½-inch Circular Spring Bow Pencil
- 1010. 3½-inch Circular Spring Bow Pen
- 1013. 6 -inch Hairspring Divider
- 1023. 6 -inch Compass, with improved straightening device, both legs jointed, with lengthening bar and interchangeable needle, pencil and pen parts, combination key and lead box.

No. 1036A. Pocket Book Style Case, containing same parts as No. 1036, but with Center Screw Straight Steel Bows Nos. 874, 875 and 876 instead of Nos. 1008, 1009 and 1010.

No. 1036B. Pocket Book Style Case, containing same parts as No. 1036, but with Side Screw Straight Steel Bows Nos. 870, 871 and 872 instead of Nos. 1008, 1009 and 1010.

UNIVERSITY INSTRUMENTS

Each Instrument Stamped Post's **UNIVERSITY**



No. 1038 **UNIVERSITY**

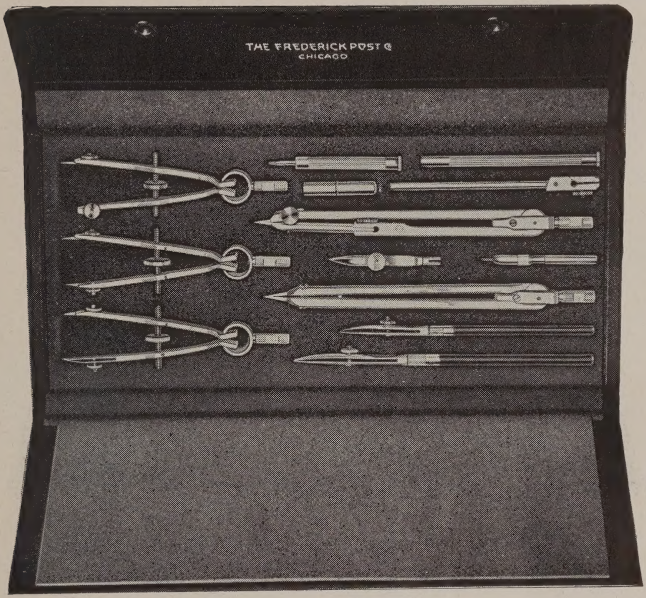
Per Set

No. 1038. Pocket Book Style Case, containing:

No. 550. 4 -inch Ruling Pen
553. 5½-inch Ruling Pen
809. 6 -inch Detail Ruling Pen
817. 4¾-inch Contour Pen
1008. 3½-inch Center Screw Bow Divider
1009. 3½-inch Center Screw Bow Pencil
1010. 3½-inch Center Screw Bow Pen
888. 5 -inch Drop Bow Pen with pencil part
1013. 6 -inch Hairspring Divider
1023. 6 -inch Compass with lengthening bar, pen and pencil parts
1024. 4 -inch Compass with pen and pencil parts
Combination Key and Lead Box

UNIVERSITY INSTRUMENTS

Each Instrument Stamped Post's UNIVERSITY



No. 1055 UNIVERSITY

Per Set,

No. 1055. Pocket Book Style Case, containing:

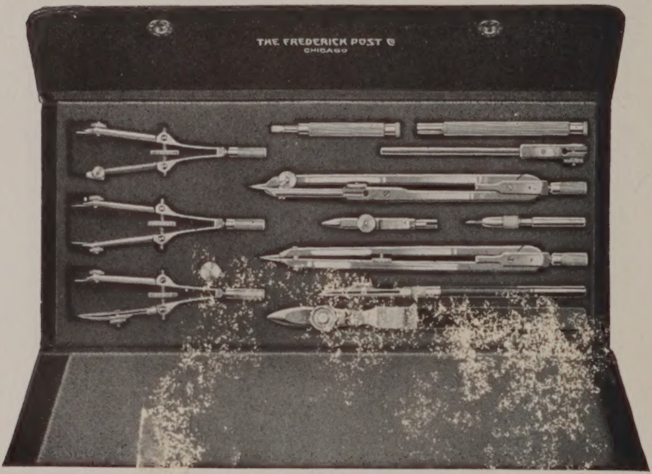
No.	Item
800.	4½-inch Ruling Pen
553.	5½-inch Ruling Pen
1008.	3½-inch Circular Spring Bow Divider
1009.	3½-inch Circular Spring Bow Pencil
1010.	3½-inch Circular Spring Bow Pen
1013.	6 -inch Hairspring Divider
1020.	6 -inch Complete Compass

No. 1055A. Pocket Book Style Case, containing same parts as No. 1055, but with Center Screw Straight Steel Bows Nos. 874, 875 and 876 instead of Nos. 1008, 1009 and 1010.

No. 1055B. Pocket Book Style Case, containing same parts as No. 1055, but with Side Screw Straight Steel Bows Nos. 870, 871 and 872 instead of Nos. 1008, 1009 and 1010.

UNIVERSITY INSTRUMENTS

Each Instrument Stamped Post's UNIVERSITY



No. 1056 A **UNIVERSITY**

Per Set,

No. 1056. Pocket Book Style Case, containing:
No. 809. [illegible]-inch Detail Pen
553. 5½-inch Ruling Pen
1008. 3½-inch Circular Spring Bow Divider
1009. 3½-inch Circular Spring Bow Pencil
1010. 3½-inch Circular Spring Bow Pen
1013. 6 -inch Hairspring Divider
1020. 6 -inch Complete Compass

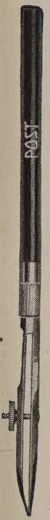
No. 1056A. Pocket Book Style Case, containing same parts as No. 1056, but with Center Screw Straight Steel Bows Nos. 874, 875 and 876 instead of Nos. 1008, 1009 and 1010.

No. 1056B. Pocket Book Style Case, containing same parts as No. 1056, but with Side Screw Straight Steel Bows Nos. 870, 871 and 872 instead of Nos. 1008, 1009 and 1010.

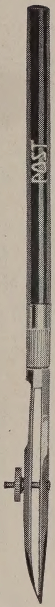
COLLEGE INSTRUMENTS

RULING PENS

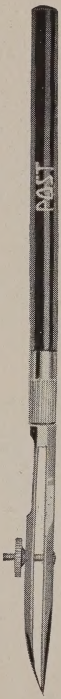
Each Instrument Stamped Post's **COLLEGE**



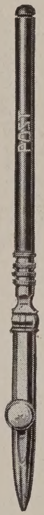
1060



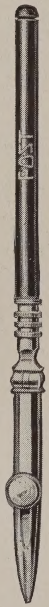
1060A



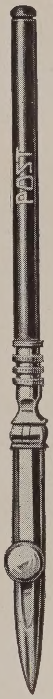
1060B



1061



1061A



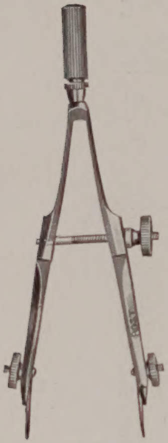
1061B

		Each
No. 1060.	Ruling Pen, Spring Blade, Metal Handle, 4½-inch......	
1060A.	“ “ “ “ “ “ 5 “	
1060B.	“ “ “ “ “ “ 5½ “	
1061.	“ “ with joint, Metal Handle, 4½-inch........	
1061A.	“ “ “ “ “ “ 5 “	
1061B.	“ “ “ “ “ “ 5½ “	

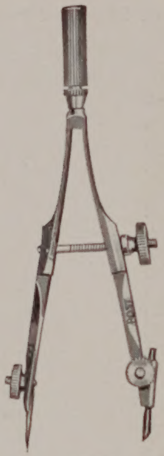
COLLEGE INSTRUMENTS

BOW INSTRUMENTS

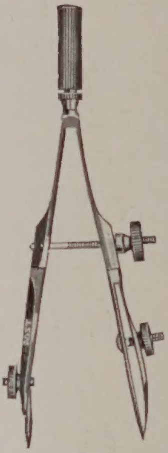
Each Instrument Stamped Post's **COLLEGE**



1062

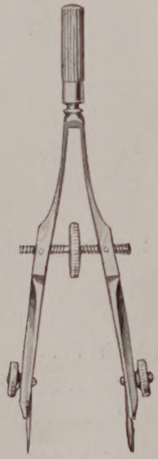


1063

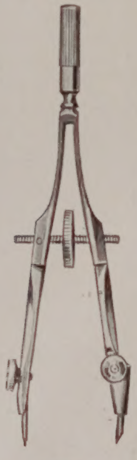


1064

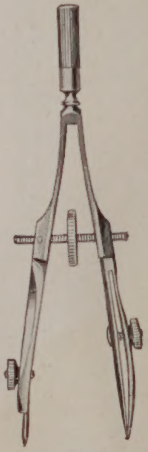
No. 1062. Straight Steel Bow Divider, 3½-inch, Side Screw....... Each
1063. " " " Pencil, 3½-inch, Side Screw........
1064. " " " Pen, 3½-inch, Side Screw..........



1062C



1063C



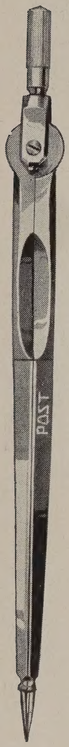
1064C

No. 1062C. Straight Steel Bow Divider, 3½-inch, Center Screw.....
1063C. " " " Pencil, 3½-inch, Center Screw.....
1064C. " " " Pen, 3½-inch, Center Screw.......

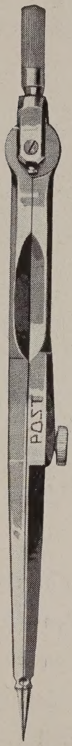
COLLEGE INSTRUMENTS

COMPASS AND DIVIDERS

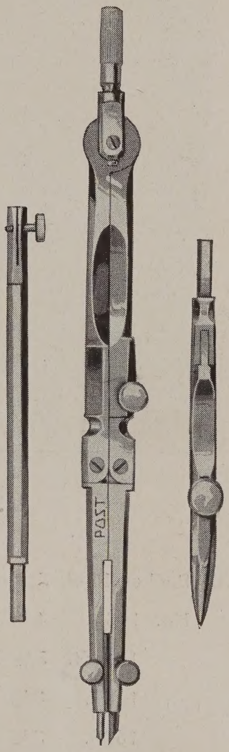
Each Instrument Stamped Post's **COLLEGE**



1065



1066



1067

Each

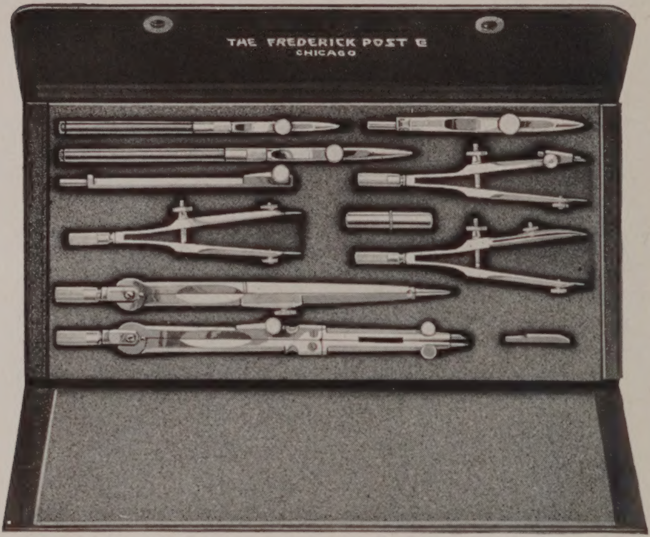
No. 1065. Plain Divider, with straightening device, 6-inch.........

1066. Hairspring Divider, with straightening device, 6-inch....

1067. Compass, fixed needle point, pencil part, pen part and lengthening bar, with straightening device..............

COLLEGE INSTRUMENTS

Each Instrument Stamped Post's **COLLEGE**



No. 1075 **COLLEGE**

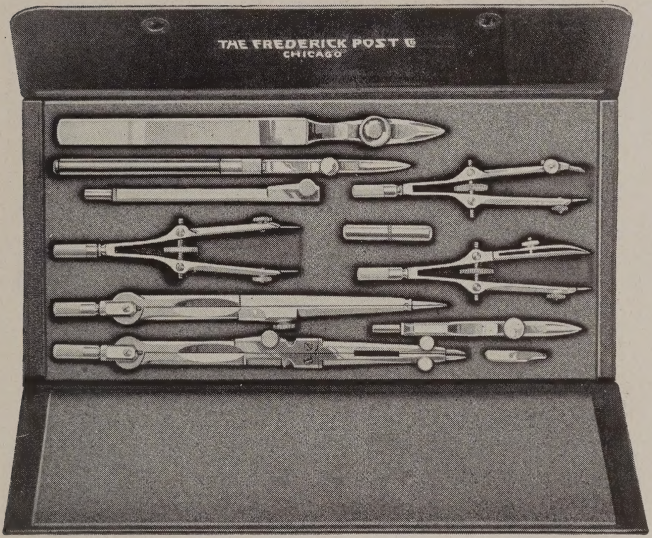
Per Set

No. 1075. Pocket Book Style Case, containing:
No. 1060. 4½-inch Ruling Pen with release
1060B. 5½-inch Ruling Pen with release
1062. 3½-inch Bow Divider (Side Screw)
1063. 3½-inch Bow Pencil (Side Screw)
1064. 3½-inch Bow Pen (Side Screw)
1066. 6 -inch Hairspring Divider
1067. 6 -inch Compass complete
Combination Key, extra needle points and Lead Box.....

No. 1075C. Pocket Book Style Case, containing same parts as No. 1075, but with straight Steel Bows, with Center Screws Nos. 1062C, 1063C and 1064C, instead of Nos. 1062, 1063 and 1064 ....

COLLEGE INSTRUMENTS

Each Instrument Stamped Post's **COLLEGE**



No. 1076 C **COLLEGE**

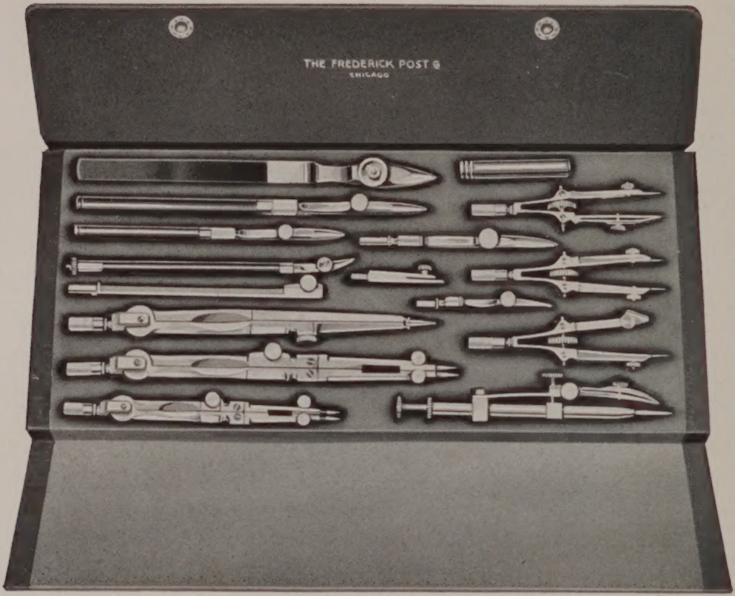
No. 1076. Pocket Book Style Case, containing:

No. 1060A. 5 -inch Ruling Pen with release
809. 6 -inch Detail Pen
1062. 3½-inch Bow Divider (Side Screw)
1063. 3½-inch Bow Pencil (Side Screw)
1064. 3½-inch Bow Pen (Side Screw)
1066. 6 -inch Hairspring Divider
1067. 6 -inch Compass complete

No. 1076C. Pocket Book Style Case, containing same parts as No. 1076, but with Straight Steel Bows with Center Screws Nos. 1062C, 1063C and 1064C, instead of Nos. 1062, 1063 and 1064 . . . .

COLLEGE INSTRUMENTS

Each Instrument Stamped Post's **COLLEGE**



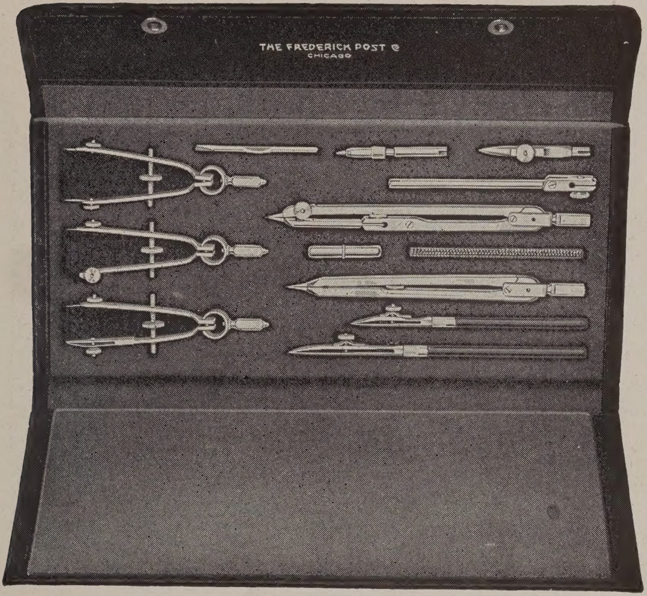
No. 1078 **COLLEGE**

No. 1078. Pocket Book Style Case, containing:

No. 800.	4½-inch Ruling Pen
553.	5½-inch Ruling Pen
809.	6 -inch Detail Ruling Pen
817.	4¾-inch Contour Pen
1062C.	3½-inch Center Screw Bow Divider
1063C.	3½-inch Center Screw Bow Pencil
1064C.	3½-inch Center Screw Bow Pen
888.	5 -inch Drop Bow Pen with pencil part
1066.	6 -inch Hairspring Divider
1067.	6 -inch Compass with lengthening bar, pen and pencil parts
1068.	4 -inch Compass with pen and pencil parts
	Combination Key and Lead Box

ACADEMY INSTRUMENTS

Each Instrument Stamped Post's ACADEMY



No. 1085 **ACADEMY**

Per Set

No. 1085. Pocket Book Style Case, containing:

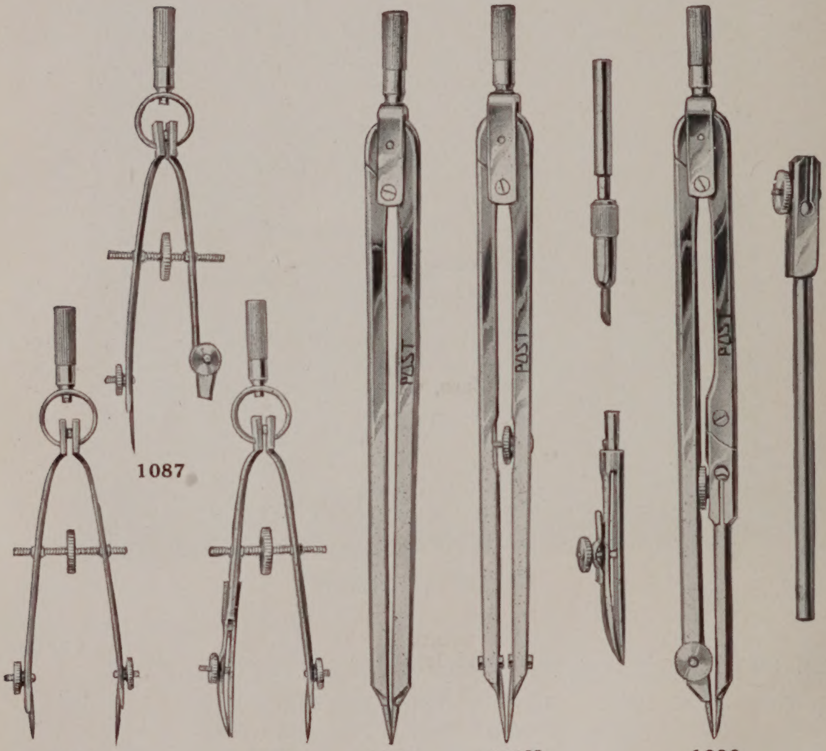
No. 1060.	4½-inch Ruling Pen with release
1060B.	5½-inch Ruling Pen with release
1086.	3½-inch Bow Divider (Center Screw)
1087.	3½-inch Bow Pencil (Center Screw)
1088.	3½-inch Bow Pen (Center Screw)
1089H.	6 -inch Hairspring Divider
1090.	6 -inch Compass with interchangeable needle points, divider part, pencil part, pen part and lengthening bar

Metal Handle, Key and Lead Box....................

No. 1085S. Pocket Book Style Case, containing same parts as No. 1085, but with Straight Steel Bows with Side Screws Nos. 1062, 1063 and 1064, instead of Nos. 1086, 1087 and 1088

ACADEMY INSTRUMENTS

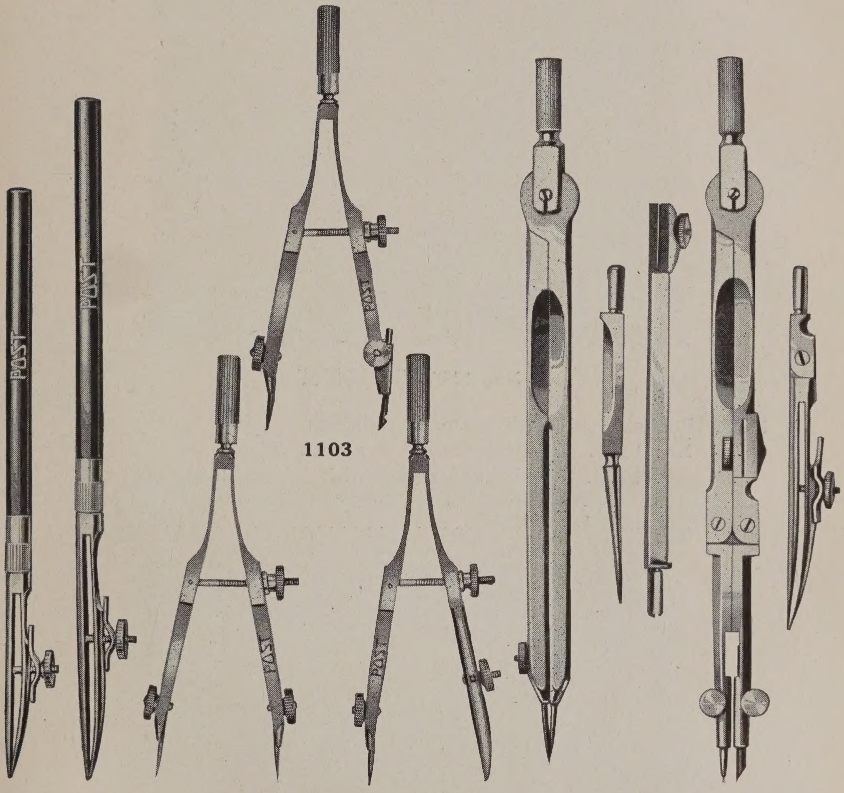
Each Instrument Stamped Post's ACADEMY



No.		Each
No. 1086.	Circular Spring Bow Divider, 3½-inch, Center Screw...	
1087.	" " " Pencil, 3½-inch, Center Screw....	
1088.	" " " Pen, 3½-inch, Center Screw......	
1089.	Plain Divider, with straightening device, 6-inch......	
1089H.	Hairspring Divider, with straightening device, 6-inch...	
1090.	Compass, interchangeable needle points, divider part, pencil part, pen part and lengthening bar, with straightening device, 6-inch..................................	

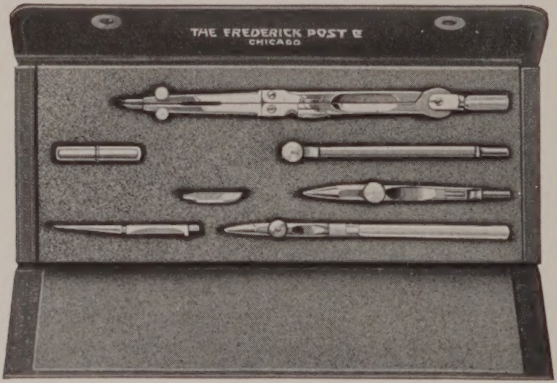
STUDENT INSTRUMENTS

Each Instrument Stamped Post's


POST
POST
1103
POST
POST
1100
1101
1102
1104
1105
1106

No.		Each
No. 1100.	Ruling Pen, with Release, 4½-inch....................	
1101.	" " " " 5½ "	
1102.	Straight Steel Bow Divider, 3½-inch..................	
1103.	" " " Pencil, 3½-inch..................	
1104.	" " " Pen, 3½-inch....................	
1105.	Hairspring Divider, 5½-inch, with straightening device..	
1106.	Compass, 5½-inch, with jointed legs, pen part, lengthening bar and straightening device.....................	

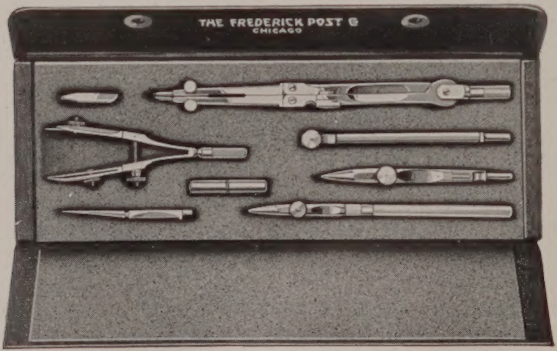
STUDENT INSTRUMENTS


THE FREDERICK POST C
CHICAGO

No. 1107 **STUDENT**

Per Set

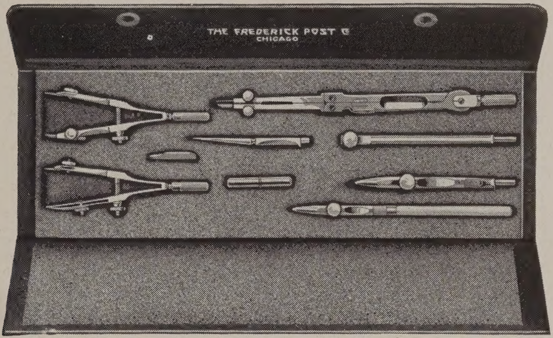
No. 1107. Pocket Book Style Case, containing:
No. 1101. 5½-inch Ruling Pen with release
1106. 5½-inch Compass with jointed legs, pen part, lengthening bar and straightening device
Key and Lead Box....................................


THE FREDERICK POST C
CHICAGO

No. 1108 **STUDENT**

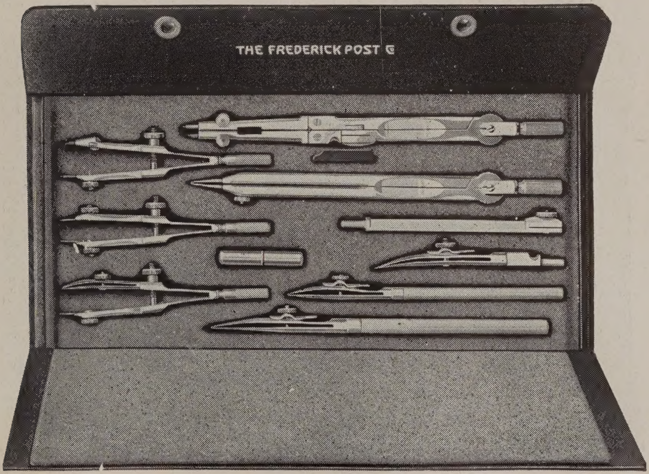
No. 1108. Pocket Book Style Case, containing:
No. 1101. 5½-inch Ruling Pen with release
1104. 3½-inch Bow Pen
1106. 5½-inch Compass with jointed legs, pen part, lengthening bar and straightening device
Key and Lead Box....................................

STUDENT INSTRUMENTS



No. 1109 **STUDENT**

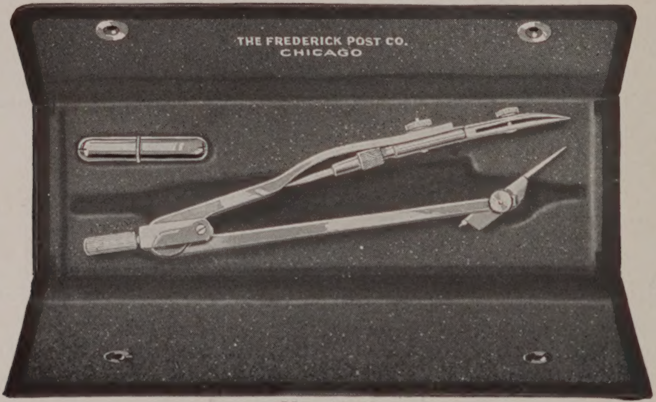
No. 1109. Pocket Book Style Case, containing: Per Set
No. 1101. 5½-inch Ruling Pen with release
1103. 3½-inch Bow Pencil
1104. 3½-inch Bow Pen
1106. 5½-inch Compass with jointed legs, pen part, lengthening bar and straightening device



No. 1110 **STUDENT**

No. 1110. Pocket Book Style Case, containing: Per Set
No. 1100. 4½-inch Ruling Pen with release
1101. 5½-inch Ruling Pen with release
1102. 3½-inch Bow Divider
1103. 3½-inch Bow Pencil
1104. 3½-inch Bow Pen
1105. 5½-inch Hairspring Divider
1106. 5½-inch Compass with jointed legs, pen part, lengthening bar and straightening device

JUNIOR INSTRUMENTS



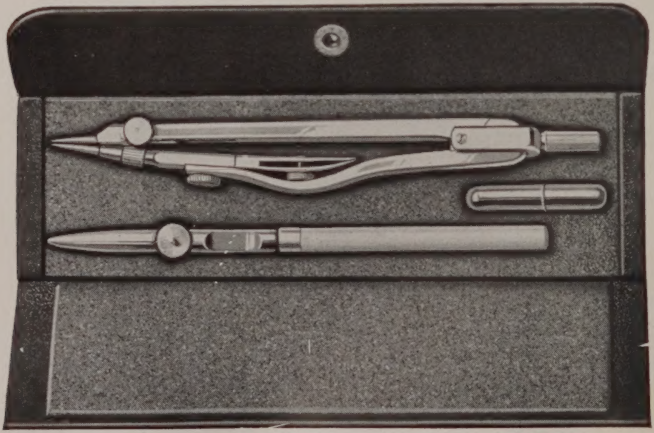
No. 1117

Each

No. 1116. Combination Compass, 5-inch, with divider, pencil and pen part and lead box, in cardboard carton. . . . .

Each

No. 1117. Combination Compass, same as No. 1116, but furnished in velvet-lined leatherette pocketbook style case. . . . .



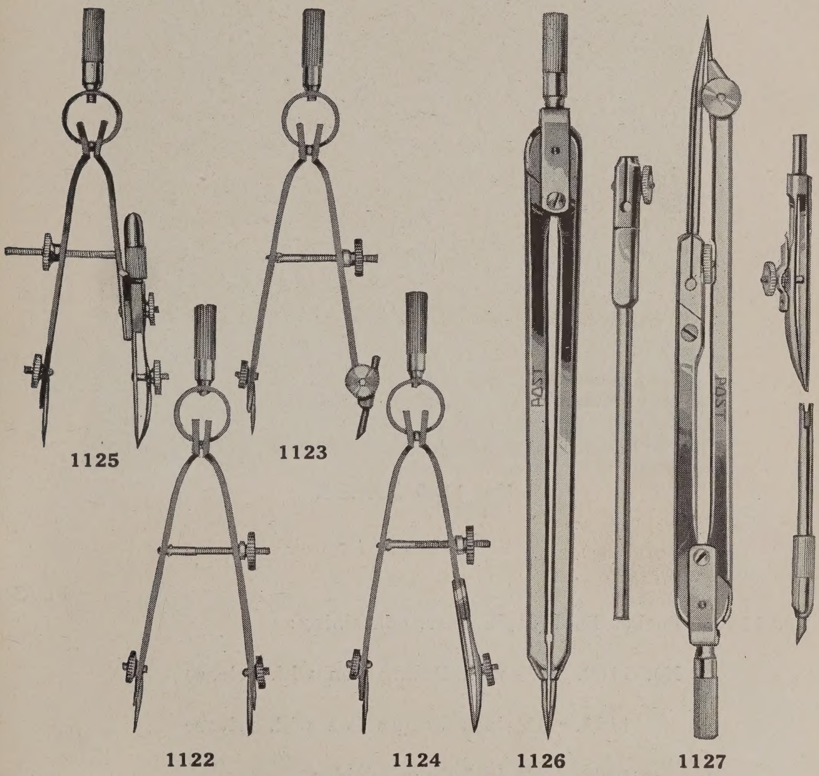
No. 1118

No. 1118. Combination Compass 5-inch with No. 1119A Ruling Pen

No. 1119

No. 1119. Ruling Pen, Spring Blade, 4½-inch. . . . .
1119A. " " " " 5 " . . . .

JUNIOR INSTRUMENTS



Each

No. 1122. Circular Spring Bow Divider, 3½-inch ....

1123. " " " Pencil, 3½-inch ....

1124. " " " Pen, 3½-inch...................

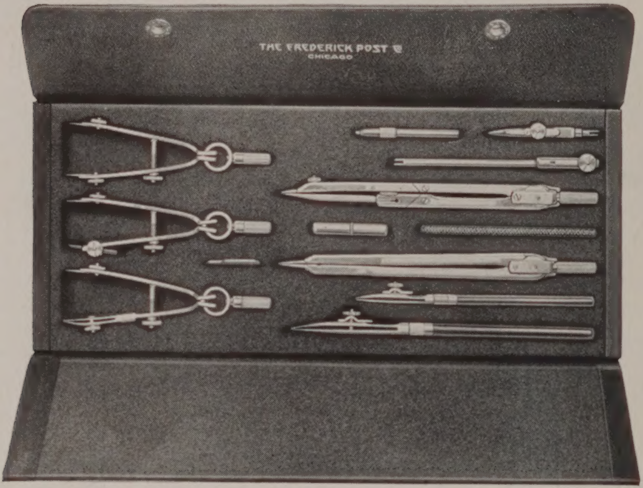
1125. " " Combination Bow Pencil and Pen, 3½-in.

1126. Plain Divider with Straightening Device, 5½-inch......

1127. Compass, 5½-inch, fixed needle point leg, divider part, pencil part and lengthening bar, with straightening device

1128. Same as 1127, but with jointed Compass legs...........

JUNIOR INSTRUMENTS



No. 1130 **JUNIOR**

Per Set

No. 1130. Pocket Book Style Case, containing:

No. 1100. 4½-inch Ruling Pen with release

1101. 5½-inch Ruling Pen with release

1122. 3½-inch Bow Divider

1123. 3½-inch Bow Pencil

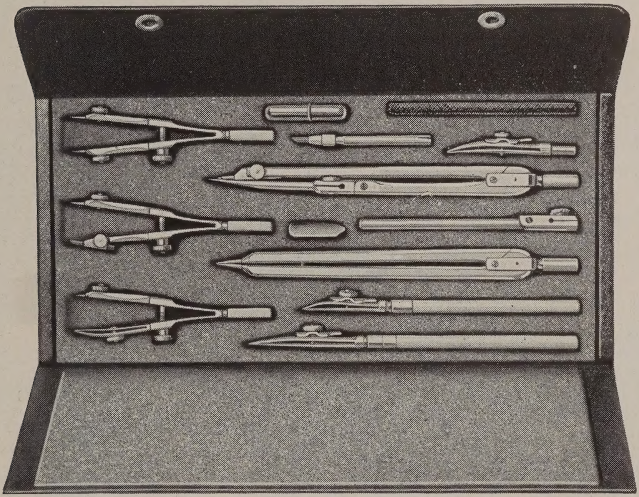
1124. 3½-inch Bow Pen

1126. 5½-inch Plain Divider

1127. 5½-inch Compass with fixed needle point leg, divider part, pen part, pencil part, and lengthening bar with straightening device

Metal Handle, Key and Lead Box....................

JUNIOR INSTRUMENTS



No. 1135 **JUNIOR**

Per Set

No. 1135. Pocket Book Style Case, containing:

No. 1100. 4½-inch Ruling Pen with release

1101. 5½-inch Ruling Pen with release

1102. 3½-inch Straight Steel Bow Divider (Side Screw)

1103. 3½-inch Straight Steel Bow Pencil (Side Screw)

1104. 3½-inch Straight Steel Bow Pen (Side Screw)

1126. 5½-inch Plain Divider

1127. 5½-inch Compass with fixed needle point leg, divider part, pen part, pencil part and lengthening bar with straightening device

Metal Handle, Key and Lead Box.....................

JUNIOR INSTRUMENTS

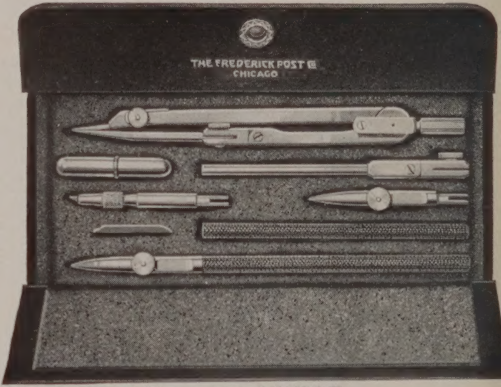
No. 1140

Pocket Book Style Case, containing:

4¾-inch Ruling Pen

4¾-inch Compass with divider part, pencil part, pen part and lengthening bar

Metal Handle, Key and Lead Box . . . .


THE FREDERICK POST CO
CHICAGO

No. 1140 **JUNIOR**

No. 1141

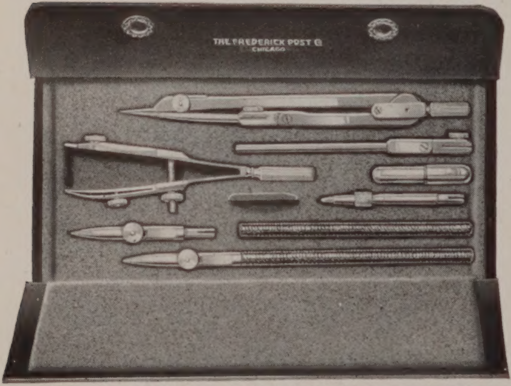
Pocket Book Style Case, containing:

4¾-inch Ruling Pen

3¼-inch Circular Spring Bow Pen

4¾-inch Compass with divider part, pencil part, pen part and lengthening bar

Metal Handle, Key and Lead Box . . . .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No. 1141 **JUNIOR**

No. 1142

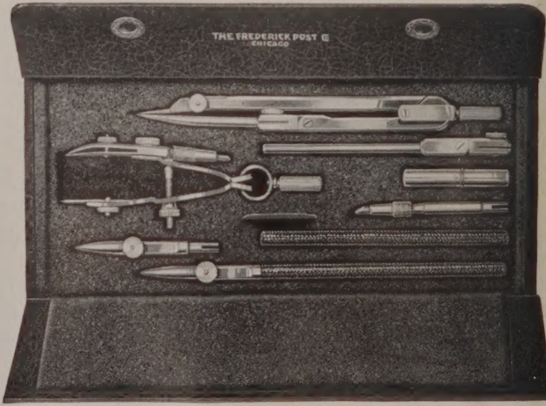
Pocket Book Style Case, containing:

4¾-inch Ruling Pen

3¼-inch Combination Bow Pen and Pencil

4¾-inch Compass with divider part, pencil part, pen part and lengthening bar

Metal Handle, Key and Lead Box . . . . .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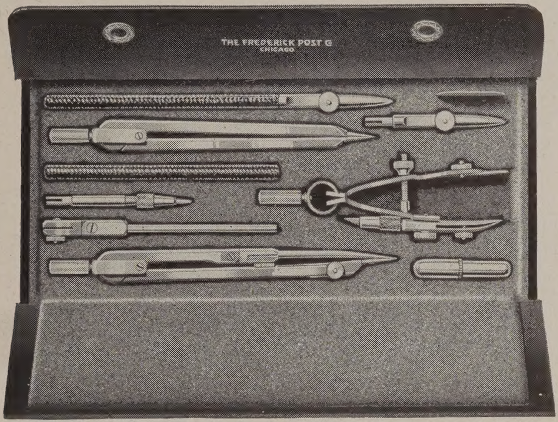
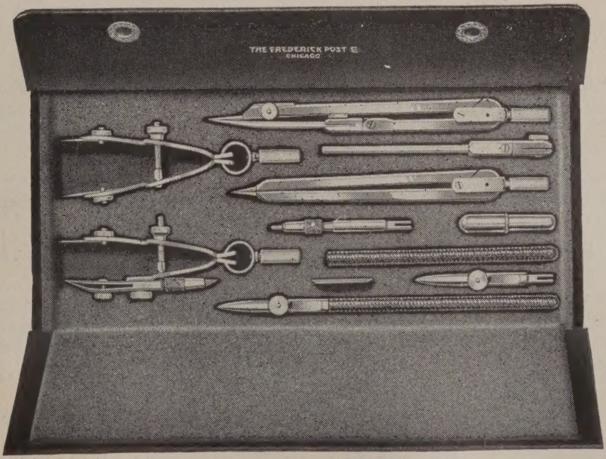
No. 1142 **JUNIOR**

JUNIOR INSTRUMENTS



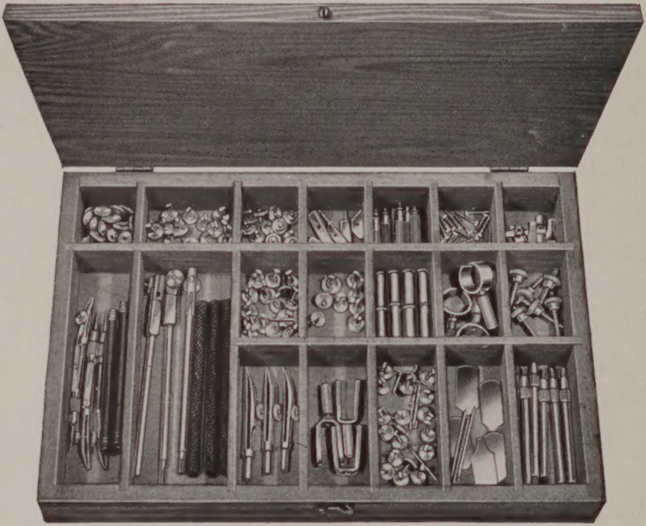
No. 1143 JUNIOR

No. 1143. Pocket Book Style Case, containing: Per Set
- 4¾-inch Ruling Pen
- 3¼-inch Combination Bow Pen and Pencil
- 4¾-inch Plain Divider
- 4¾-inch Compass with divider part, pencil part, pen part and lengthening bar



No. 1144 JUNIOR

No. 1144. Pocket Book Style Case, containing: Per Set
- 4¾-inch Ruling Pen
- 3¼-inch Circular Bow Divider
- 3¼-inch Circular Combination Bow Pen and Pencil
- 4¾-inch Plain Divider
- 4¾-inch Compass with divider part, pencil part, pen part and lengthening bar



No. 1000

COLLEGE REPAIR OUTFIT

Our Outfits containing repair and replacement parts are useful and convenient in institutions where our Instruments have been adopted. All repairs can be easily and rapidly made, overcoming the necessity and inconvenience of sending Instruments out to be reconditioned.

The case consists of a number of compartments each containing an individual repair or replacement part. The number of parts in each compartment depends entirely upon the number of sets in use in the institution.

A pair of tweezers and a small screw driver are part of the Repair Outfit to assist in handling the small parts in making repairs.

Parts of the various lines are indicated by individual catalog numbers as shown on the following page. When ordering repair parts be sure and select the desired number corresponding to the quality of Instruments in use in your institution.

No. 600. **PRIMO** Repair Outfit............................Each,
700. **CORONA & UNIVERSITY** Repair Outfit...........
900. **EXCELSIOR** Repair Outfit.......................
1000. **COLLEGE** Repair Outfit.........................
1114. **STUDENT** Repair Outfit.........................
1115. **ACADEMY & JUNIOR** Repair Outfit...............

REPAIR AND REPLACEMENT PARTS FOR DRAWING INSTRUMENTS

	Primo	Corona & University	Excelsior	College	Student	Academy & Junior
Screw for Ruling Pen...	600-1	700-1	900-1	1000-1	1100-1	1130-1
Screw for Detail Pen...	600-2	700-2	900-2	1000-2	....	....
Screw for Compass Pen.	600-3	700-3	900-3	1000-3	1100-3	1130-3
Clamp Nut & Bolt for Bow Instruments....	600-4	700-4	900-4	1000-4	1100-4	1130-4
Bolt & Nut for Bow Pen.	600-5	700-5	900-5	1000-5	1100-5	1130-5
Pencil Clamping Screw for Bow Pencil.......	600-6	700-6	900-6	1000-6	1100-6	1130-6
Adj. Screw Complete for Center Wheel Bows..	600-7	700-7	900-7	1000-7	1100-7	1130-7
Adj. Screw Complete for Side Screw Bows.....	600-8	700-8	900-8	1000-8	1100-8	1130-8
Clamping Screw for Pencil and Needle Points on Large Compass...	600-9	700-9	900-9	1000-9	1100-9	1130-9
Leg Clamping Screw for Compass...........	600-10	700-10	900-10	1000-10	1100-10	1130-10
Hairspring Adj. Screw for Divider..........	600-11	700-11	900-11	1000-11	1100-11	1130-11
Compass & Divider Head Assembly Complete..	600-12	700-12	900-12	1000-12	1100-12	1130-12
Compass Pen Part.....	600-13	700-13	900-13	1000-13	1100-13	1130-13
Compass Pencil Part...	600-14	700-14	900-14	1000-14	1100-14	1130-14
Compass Divider Part..	600-15	700-15	900-15	1000-15	1100-15	1130-15
Compass Extension Bar.	600-16	700-16	900-16	1000-16	1100-16	1130-16
Shoulder Needle Points for Bows............	600-17	700-17	900-17	1000-17	1100-17	1130-17
Shoulder Needle Points for Compasses.......	600-18	700-18	900-18	1000-18	1100-18	1130-18
Straightening Device...	......	700-19	900-19	1000-19	1100-19	1130-19
Circular Spring Head for Bows...............	......	700-20	......	....	....	1130-20
Handles for Ruling Pens (Specify length of Pen)	600-21	700-21	900-21	1000-21	1100-21	1130-21
Screw Bolt for Needle Point...............	......	700-22	......	....	....	....

BOXWOOD AND WHITE EDGE SCALES

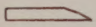
PRIMO AND REGULAR SHAPE

Scales are Machine Divided to U. S. Standard Measurements; made of carefully selected, best grade, seasoned Boxwood to insure accuracy and lasting quality. They are made in two styles: Plain Boxwood and Boxwood with White Edge.

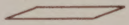
The white edges are not painted on; they consist of solid, carefully inlaid material, well seasoned to eliminate shrinkage or expansion. They permit easier reading. The graduations are sharp and distinct.

To eliminate difficulty in ordering where Special Scales are required, we list below the various shapes and methods of dividing such as open divided and full divided:

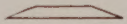
FLAT SCALES



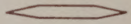
Single Bevel



Opposite Bevel

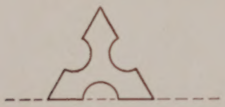


Two Bevel

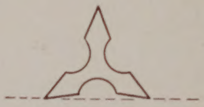


Four Bevel

TRIANGULAR SCALES



Regular Shape



Primo Shape

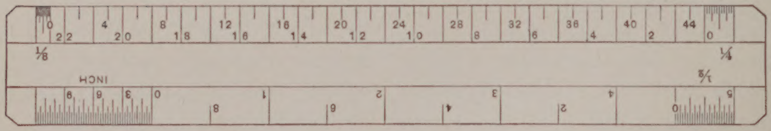


Figure 1

The above is an open divided scale, especially recommended for architectural and mechanical engineering work.

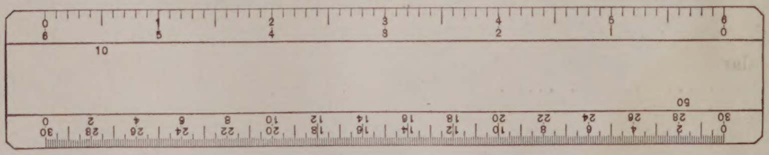


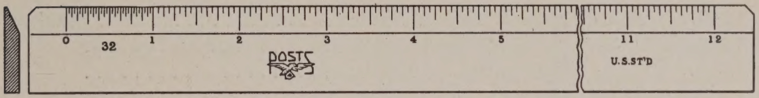
Figure 2

The above is a full divided scale, especially recommended for civil engineering work. All Chain Scales are full divided.

FLAT BOXWOOD SCALES

SINGLE BEVEL

These Scales have but one division, graduations reading from left to right.

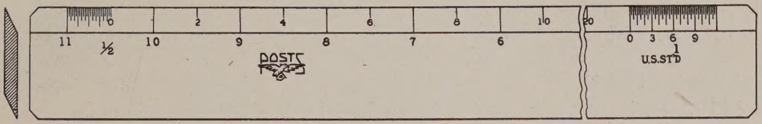


No. 1150. 12 inches long, divided to 1/16-inch

No. 1150. Boxwood, 12 inches, divided to 1/16 inch.
1151. " 12 inches, " " 1/32 inch.
1152. " 12 inches, " " 1/10 inch.

OPPOSITE BEVEL

These Scales are an improvement over the regular flat shape as they may be picked up more readily and present but one graduated edge to the eye when in use. Open divided.

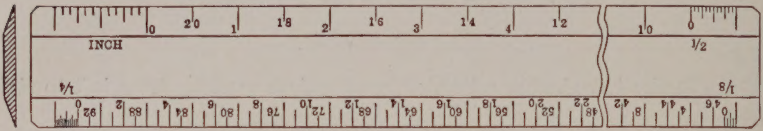


No. 1158

Divided ⅛, ¼ × ½, 1 inch to the foot.
No. 1157. Opposite Bevel Boxwood Scale, 6 inches............Each,
1158. " " " " 12 " ....
Divided ⅜, ¾ × 1½, 3 inches to the foot.
1159. Opposite Bevel Boxwood Scale, 6 inches............
1160. " " " " 12 " ....
Chain Scale, Full divided, 10x50 parts to the inch.
1161. Opposite Bevel Boxwood Chain Scale, 6 inches......
1162. " " " " " 12 " ......

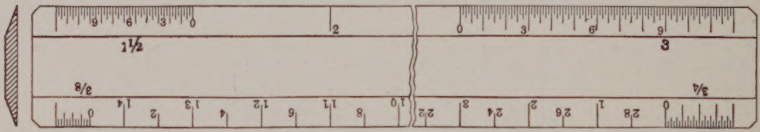
Scales with Special Graduations Made to Order. Write us for Quotations. Send Sketch Showing Divisions and Numbering Desired.

FLAT BOXWOOD SCALES



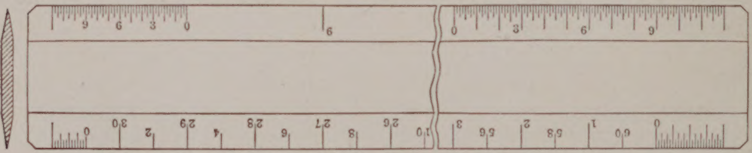
Open Divided: ⅛, ¼, ½ and 1 inch to the foot.

No. 1200. Flat Boxwood Scale, 6 inches....................Each,
1201. " " " 12 " ....
1202. " " " 12½ " ....



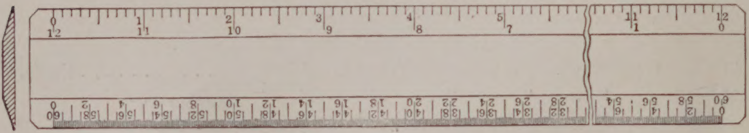
Open Divided: ⅜, ¾, 1½ and 3 inches to the foot.

No. 1206. Flat Boxwood Scale, 6 inches....................Each,
1208. " " " 12 " ....



Open Divided: ⅛, ¼, ½, 1x⅜, ¾, 1½, 3 inches to the foot.

1216. Flat Boxwood Scale, 12 inches, both sides beveled and divided ....Each,

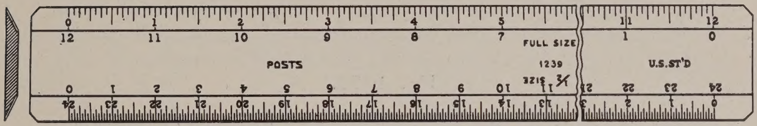


No. 1226. Full Divided.

No. 1222. Flat Boxwood Chain Scale, 6 in., div. 10x50 parts to the in...Each,
1223. " " " " 6 " " 20x40 " " " " ..
1224. " " " " 6 " " 30x60 " " " " ..
1226. " " " " 12 " " 10x50 " " " " ..
1227. " " " " 12 " " 20x40 " " " " ..
1228. " " " " 12 " " 30x60 " " " " ..

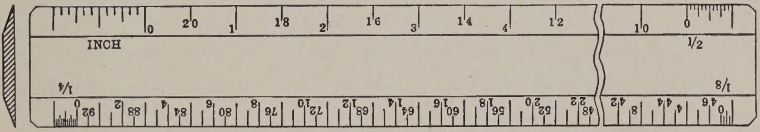
FLAT WHITE EDGE SCALES

REGULAR BEVEL



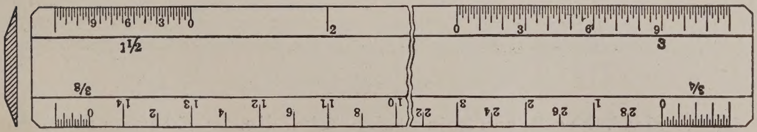
Full Divided: ½x1 inch to the inch.

No. 1238. Flat White Edge Scale, 6 inches.....................Each,
1239. " " " " 12 " ....



Open Divided: ⅛, ¼, ½ and 1 inch to the foot.

No. 1240. Flat White Edge Scale, 6 inches.....................Each,
1242. " " " " 12 " ....
1243. " " " " 12½ " ....
1246. " " " " 24 " ....



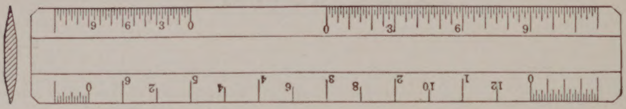
Open Divided: ⅜, ¾, 1½ and 3 inches to the foot.

No. 1248. Flat White Edge Scale, 6 inches.....................Each,
1249. " " " " 12 " ....
1251. " " " " 24 " ....

Scales with Special Graduations Made to Order. Write Us for Quotations. Send Sketch Showing Divisions and Numbering Desired.

FLAT WHITE EDGE SCALES

FOUR BEVEL

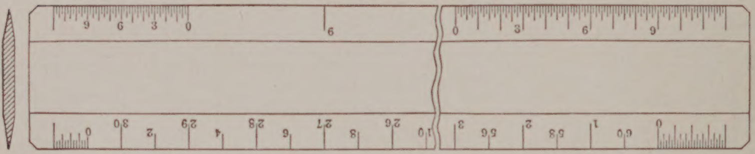


No. 1252.

Open Divided: ⅛, ¼, ½, 1x⅜, ¾, 1½, 3 inches to the foot.

No. 1252. Flat White Edge 6 inch Pocket Scale, both sides beveled and divided, in leather sheath, less than one inch wide . . Each,

(Engineers' Pocket Scales, see Catalog Nos. 1268 and 1269)

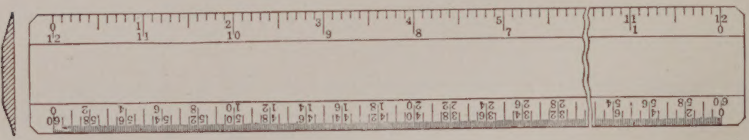


No. 1253

Open Divided: ⅛, ¼, ½, 1x⅜, ¾, 1½, 3 inches to the foot.

No. 1253. Flat White Edge Scale, 12 inches, both sides beveled and divided. . . . . Each,

1255. Flat White Edge Scale, 24 inches, both sides beveled and divided . . . .



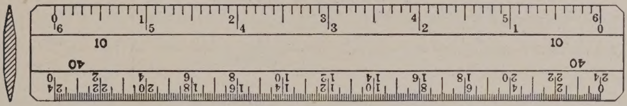
No. 1260.

No. 1256.	Flat White Edge Chain Scale,	6	in.,	div.	10×50	parts to in.	Each,
1257.	" " " " "	6	"	"	20×40	"	"
1258.	" " " " "	6	"	"	30×60	"	"
1259.	" " " " "	6	"	"	80×100	"	"
1260.	" " " " "	12	"	"	10×50	"	"
1261.	" " " " "	12	"	"	20×40	"	"
1262.	" " " " "	12	"	"	30×60	"	"
1263.	" " " " "	12	"	"	80×100	"	"

Scales with Special Graduations Made to Order. Write Us for Quotations. Send Sketch Showing Divisions and Numbering Desired.

FLAT WHITE EDGE SCALES

FOUR BEVEL POCKET SCALES

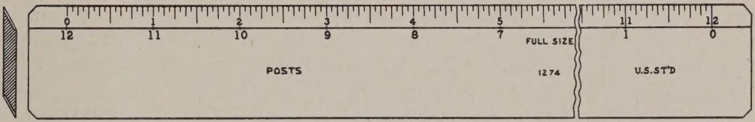


No. 1268.

Scales less than one inch wide, in leather sheath.

No. 1268. Full Divided 10x50 and 20x40....................Each,
1269. " " 10x50 and 30x40....................

OPPOSITE BEVEL WHITE EDGE SCALES



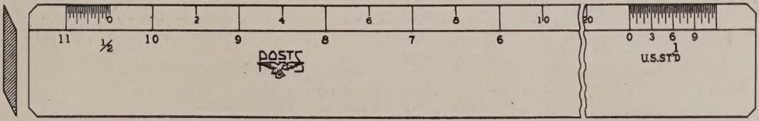
No. 1274.

Full Divided: ⅛ and ¼ size scale.

No. 1266. Opposite bevel, White Edge Scale, 6 inches..........
1267. " " " " " 12 " ....

Full Divided: ½ and full size scale.

1273. Opposite bevel, White Edge Scale, 6 inches..........
1274. " " " " " 12 " ....



No. 1272.

Open Divided: ⅛, ¼x½, 1 inch to the foot.

No. 1270. Opposite bevel, White Edge Scale, 6 inches..........Each,
1272. " " " " " 12 " ....

Open Divided: ⅜, ¾x1½, 3 inches to the foot.

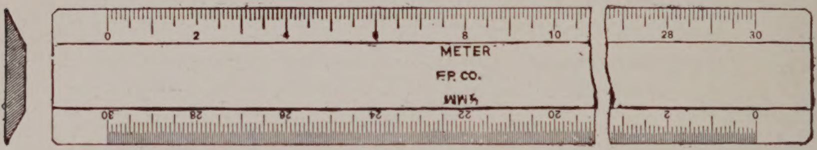
1275. Opposite bevel, White Edge Scale, 6 inches..........
1276. " " " " " 12 " ....

Scales with Special Graduations Made to Order. Write Us for Quotations. Send Sketch Showing Divisions and Numbering Desired.

FLAT WHITE EDGE SCALES

U. S. Standard **Machine Divided**

METRIC SCALES


0
2
4
8
10
28
30
METER
F.P. CO.
MM.

No. 1278½C.

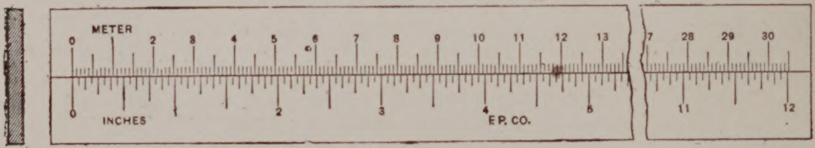
No. 1278½A. 10 centimeters long, White Edge....................Each,
1278½B. 20 " " " " ....
1278½C. 30 " " " " ....
1278½D. 50 " " " " ....

INCH AND METRIC SCALES

No. 1278½E. Boxwood Scale, 30 cm., div. 32ds in. and half mm.......Each,
1278½F. White Edge Scale, 30 cm., div. 32ds in. and half mm.....

These scales are divided in inches on one edge and in metric measure on the other and, therefore, very convenient for converting plans from one system into the other.

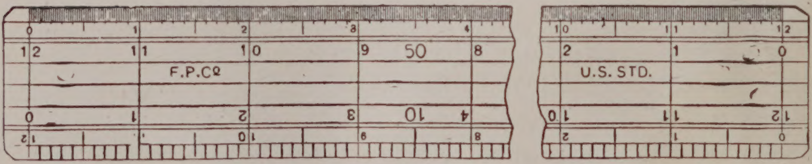
METRIC COMPARING SCALE


METER
0
2
3
4
5
6
7
8
9
10
11
12
13
27
28
29
30
0
INCHES
1
2
3
4
5
11
12
F.P. CO.

No. 1279A.

No. 1279A. Flat Scale, white facing, 30 cm., div. mm. and 16th in. (not beveled) ....Each,
1279B. Same as No. 1279A, but 50 cm.......................

UNDERWRITER'S SCALES


F.P.CO.
50
U.S. STD.
10

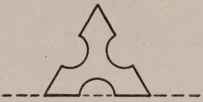
No. 1360.

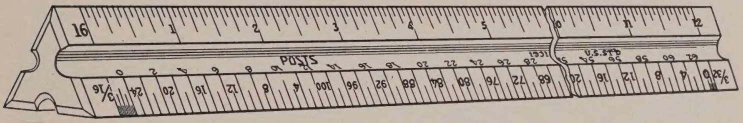
No. 1360. Flat, Transparent, Amber, Underwriter's Scale, 6 in., both edges beveled and divided 10×50 parts to the inch....Each,

1361. Flat, Underwriter's Scale, like No. 1360, but 12 inch... "

TRIANGULAR BOXWOOD SCALES

REGULAR SHAPE

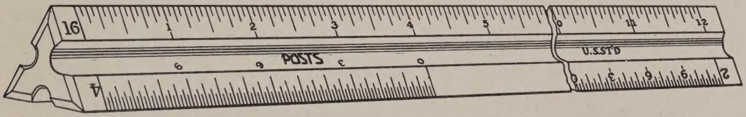




Divided: 1/16, 3/32, 3/16, ⅛, ¼, ⅜, ½, ¾, 1, 1½, 3 inches to the foot.

Each,

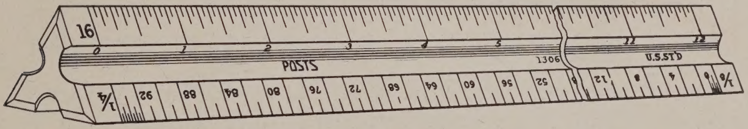
No. 1300. Triangular Boxwood Scale, 6 inches, REGULAR shape.....
1301. " " " 12 " " " .....



Divided: 1/16, ⅛, ¼, ⅜, ½, ¾, 1, 1½, 2, 3, 4 inches to the foot.

Each,

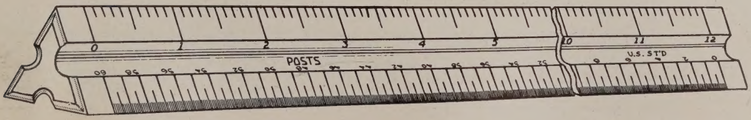
No. 1305. Triangular Boxwood Scale, 12 inches, REGULAR shape....



Divided: ⅜, ¾, ⅛, ¼, ½, 1; 50 and Half and Full size.

Each,

No. 1306. Triangular Boxwood Scale, 12 inches, REGULAR shape....



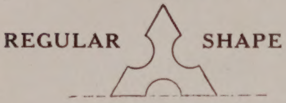
Divided: 10, 20, 30, 40, 50, 60 parts to the inch.

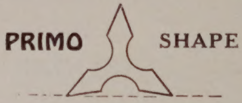
Each,

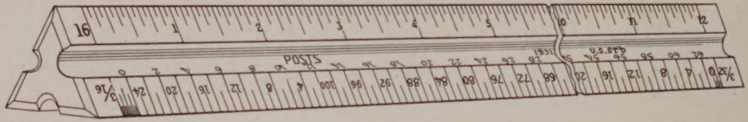
No. 1310. Triangular Boxwood Chain Scale, 6 inches, REGULAR shape
1311. " " " " 12 " " "

Scales with Special Graduations Made to Order. Write Us for Quotations. Send Sketch Showing Divisions and Numbering Desired.

TRIANGULAR WHITE EDGE SCALES

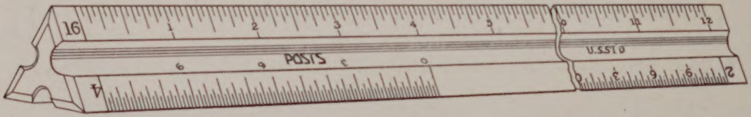






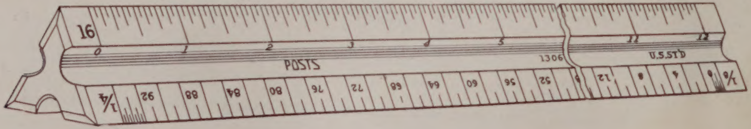
Divided: 1/16, 3/32, 3/16, ⅛, ¼, ⅜, ½, ¾, 1, 1½, 3 inches to the foot.

								Each,
No. 1330.	Triangular	White	Edge	Scale,	6	inches,	REGULAR shape	. .
1330C.	"	"	"	"	6	"	PRIMO "	. .
1331.	"	"	"	"	12	"	REGULAR "	. .
1331C.	"	"	"	"	12	"	PRIMO "	. .
1333.	"	"	"	"	24	"	REGULAR "	. .
1333C.	"	"	"	"	24	"	PRIMO "	. .



Divided: 1/16, ⅛, ¼, ⅜, ½, ¾, 1, 1½, 2, 3, 4 inches to the foot.

								Each,
No. 1335.	Triangular	White	Edge	Scale,	12	inches,	REGULAR shape	. .
1335C.	"	"	"	"	12	"	PRIMO "	. .
1338.	"	"	"	"	24	"	REGULAR "	. .
1338C.	"	"	"	"	24	"	PRIMO "	. .

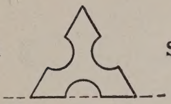


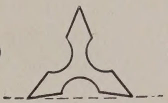
Divided: ⅜, ¾, ⅛, ¼, ½, 1; 50 and Half and Full size.

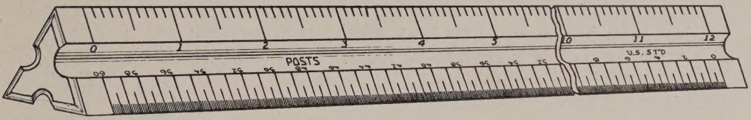
								Each,
No. 1339.	Triangular	White	Edge	Scale,	12	inches,	REGULAR shape	. .
1339C.	"	"	"	"	12	"	PRIMO "	. .

Scales with Special Graduations Made to Order. Write Us for Quotations. Send Sketch Showing Divisions and Numbering Desired.

TRIANGULAR WHITE EDGE SCALES

REGULAR  **SHAPE**

PRIMO  **SHAPE**



Each,

Divided: 10, 20, 30, 40, 50, 60 parts to the inch.

No. 1340. Triangular White Edge Chain Scale, 6 in., REGULAR shape
1340C. " " " " " 6 " PRIMO "
1341. " " " " " 12 " REGULAR "
1341C. " " " " " 12 " PRIMO "
1343. " " " " " 24 " REGULAR "
1343C. " " " " " 24 " PRIMO "

Divided: 20, 30, 40, 50, 60, 80 parts to the inch.

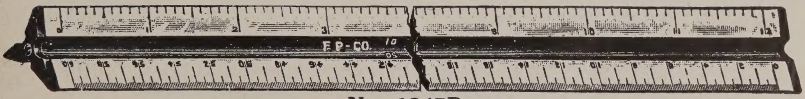
No. 1345. Triangular White Edge Chain Scale, 12 in., REGULAR shape
1345C. " " " " " 12 " PRIMO "

Divided: 100, 200, 300, 400, 500, 600 parts to the foot.

No. 1346. Triangular White Edge Chain Scale, 12 in., REGULAR shape
1346C. " " " " " 12 " PRIMO "

METALLIC TRIANGULAR SCALES

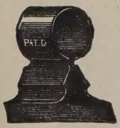
PRIMO SHAPE, 12 INCHES LONG



No. 1347B.

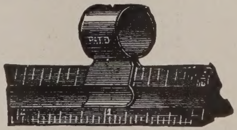
The metallic scales have the three fillets colored black, yellow and red; very convenient for finding the required division.

No. 1347A. Divided 3/32, 3/16, ⅛, ¼, ¾, 1, 1½ and 3 in. to ft.................. Each,
1347B. Divided 10, 20, 30, 40, 50 and 60 parts to inch.......................



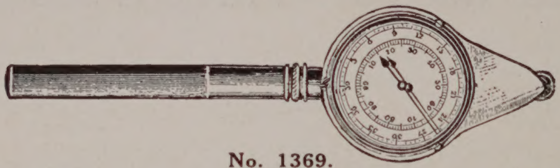
SCALE GUARD

No. 1350



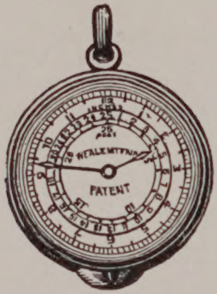
No. 1350. Triangle Scale Guard, nickel-plated..... ....Each,

MAP MEASURES

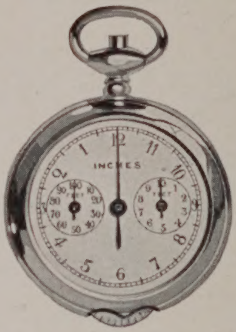


No. 1369.

No. 1369. Map Measures, 2¾-inch Metal Handle, dial 1¼ inches in diameter, registers inches to miles and centimeters to kilometers. Each,



No. 1370.



No. 1370A.

No. 1370. Map Measures, Watch Pattern, Nickel Plated, measures 25 feet in inches and 8th inches........................Each,

No. 1370A. Map Measures, Watch Pattern, Nickel Plated, 1¼-inch diameter with three dials registering one foot, ten feet and a hundred feet in inches and 8th inches, with device for setting hands back to zero....................................Each,

SHRINKAGE RULES

FOR SINGLE AND DOUBLE SHRINKAGE

These rules are of hardwood, brass tipped, about 1½ inches wide by ⅛ inch thick and divided to ⅛, 1/10, 1/12 and 1/16 inches.

						Each
No. 1371.	Shrinkage Rule,	24 2/10	equals	24	inches................	
1372.	"	" 24¼	"	24	"	
1373.	"	" 24⅜	"	24	"	
1374.	"	" 24½	"	24	"	
1375.	"	" 25	"	24	"	
1376.	"	" 25½	"	24	"	
1377.	"	" 26	"	24	"	

TRANSPARENT CELLULOID RULE

A transparent rule, ⅛ inch thick with one edge beveled. A perfect rule for use with a ruling pen.

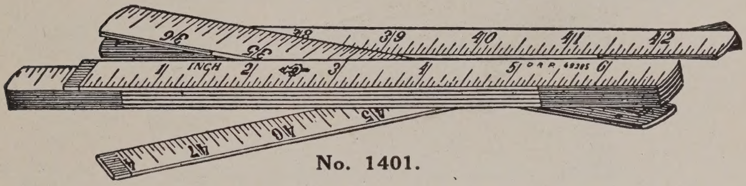
	6 in.	9 in.	12 in.	15 in.	18 in.
No. 1380. Width	1⅛	1¼	1⅜	1½	1⅝

~~160~~

144

FOLDING POCKET RULES

Yellow Finish   Brass Tipped   Concealed Joints



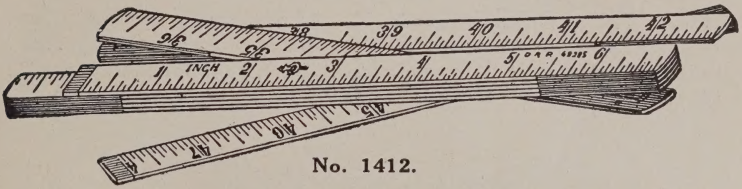
No. 1401.

These Pocket Rules are thin and light, and more convenient than the common joint rules. By a peculiar preparation of the wood, shrinkage is entirely prevented. Marked consecutive inches to 16ths, both sides.

No. 1400.	2 feet, 4 fold	Each,
1400½.	3 feet, 6 fold	
1401.	4 feet, 8 fold	
1402.	4 feet, 8 fold, inches one side, metric on other	
1404.	5 feet, 10 fold, inches both sides	
1406.	6 feet, 12 fold, inches both sides	
1408.	8 feet, 16 fold, inches both sides	
1409.	4 feet, 8 fold, inches on one side, 10ths on other	
1409A.	6 feet, 12 fold, inches on one side, 10ths on other	

White Enameled with Brass Tips   Concealed Joints

Best Quality



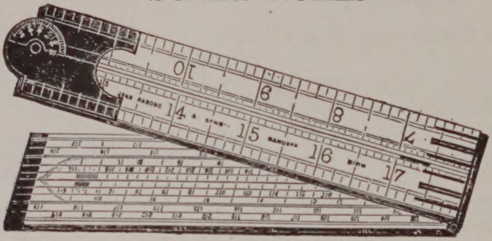
No. 1412.

These Folding Rules are covered with a white enameled coating, the black graduations being more legible and distinct where shown on the white surface; no rivets shown on surface. Marked consecutive inches to 16ths, both sides.

These rules are not affected by heat or moisture and are easily cleaned.

No. 1410.	2 feet, 4 fold	Each,
1411.	3 feet, 6 fold	
1412.	4 feet, 8 fold	
1413.	5 feet, 10 fold	
1414.	6 feet, 12 fold	
1415.	8 feet, 16 fold	
1416.	4 feet, 8 fold, inches on one side, metric on other	
1417.	4 feet, 8 fold, inches on one side, 10ths on other	
1418.	6 feet, 12 fold, inches on one side, 10ths on other	

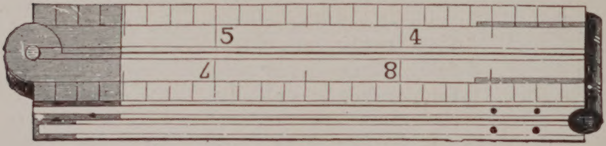
SCALE RULES



No. 1427A. Each

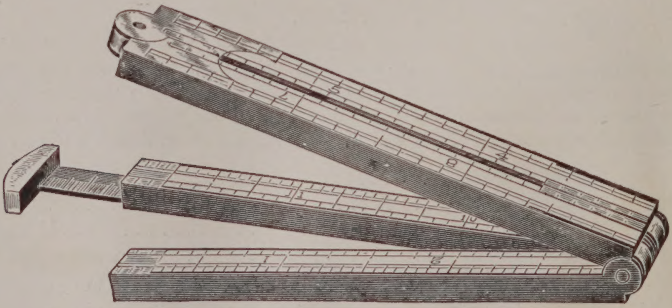
No. 1427A. Architect's Scale Rule, with beveled edges, boxwood, 2 feet, 4 folds, brass mountings, with scales on beveled edge . . . .

FOLDING POCKET RULES



No. 1428C. Each

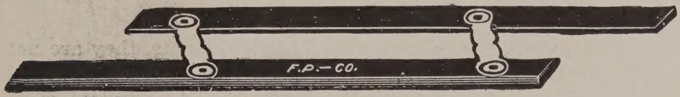
No. 1428A. Pocket Rule, Boxwood, 1 ft., 4 fold, brass mountings. . . . . .
1428B. Pocket Rule, Boxwood, 2 ft., 4 fold, brass mounting. . . . . .
1428C. Pocket Rule, Boxwood, 1 ft., 4 fold, brass bound edges. . . .
1428D. Pocket Rule, Boxwood, 2 ft., 4 fold, brass bound edges. . . .



No. 1429A. Each

No. 1429A. Pocket Rule, Boxwood, with caliper, ½ foot, 2 folds, brass mountings. . . .

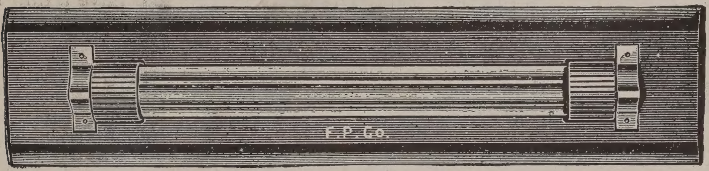
PARALLEL RULES



No. 1430B.

		Each,
No. 1430B.	Ebonized Parallel Rules, nickel plated bars, 9 inches. .	
1430C.	“ “ “ “ “ “ 12 “ . .	
1430D.	“ “ “ “ “ “ 15 “ . .	
1430E.	“ “ “ “ “ “ 18 “ . .	
1430F.	“ “ “ “ “ “ 24 “ . .	

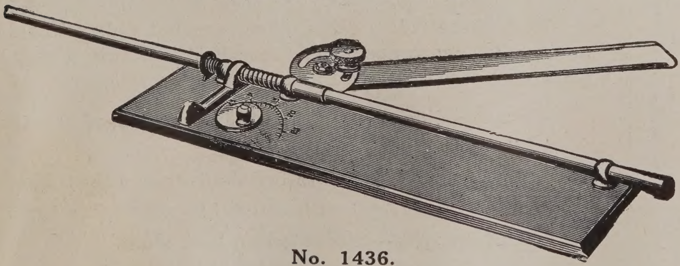
ROLLING PARALLEL RULERS



No. 1432B.

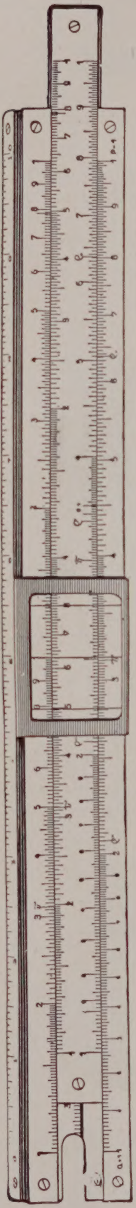
		Each,
No. 1432B.	Ebonized Rolling Parallel Rules, 12 inches.	
1432C.	“ “ “ “ 15 “	
1432D.	“ “ “ “ 18 “	
1433B.	Solid Brass Rolling Parallel Rules, 12 inches.	
1433C.	“ “ “ “ “ 15 “	
1433D.	“ “ “ “ “ 18 “	
1433E.	“ “ “ “ “ 24 “	
1434A.	Solid German Silver Rolling Parallel Rules, 12 inches. .	
1434B.	“ “ “ “ “ “ 15 “ . .	
1434C.	“ “ “ “ “ “ 18 “ . .	
1434D.	“ “ “ “ “ “ 24 “ . .	

SECTION LINERS



No. 1436.

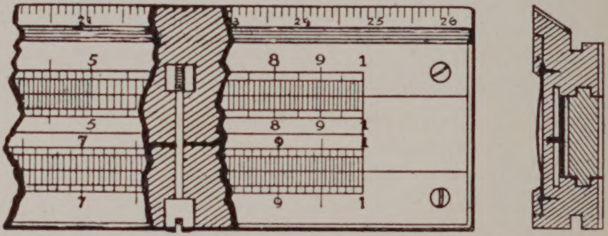
		Each,
No. 1436.	Section Liner, Hardwood, with Nickel Plated Mountings, 8-inch celluloid blade, one edge beveled.	



POST'S STANDARD SLIDE RULE

(Mannheim)

Owing to constructional improvements, they are not liable to shrink or warp, or to work tight or loose under climatic variations. A smooth and even gliding movement is obtained by the use of elastic strips, which are let into the sides of the stock. To prevent warping, the stock of the rule is covered with celluloid on both the top and bottom surfaces. With this construction, although wood and celluloid are differently affected by atmospheric changes, no deviation from the original shape of the stock can occur. These improvements are not embodied in other rules and the advantages they offer will be obvious to every user. The celluloid surfaces have a dull finish in order to avoid eyestrain.



Sectional View Showing Construction

The slide rule enables anyone who understands decimals to multiply, divide, take powers and roots, compute interest, simple and compound, and solve many complex problems in one-tenth the time these problems require by longhand.

We have acquired the **RITOW** Slide Rule patents and have developed the newest types of construction.

With these rules, calculations are not only simplified but made much more accurate, the cylindrical rule giving accurately all numbers to five and six significant figures.

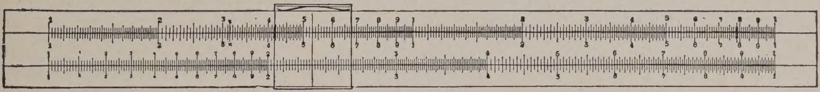
We make slide rules in the following types of construction:

1. Boxwood, not faced.
2. Mahogany faced with celluloid—not adjustable.
3. Mahogany faced with celluloid—adjustable type.
4. Duplex type—graduated on both sides.
5. Simplex type—graduated on both sides.
6. Cylindrical Slide Rules.
7. Circular Slide Rules.

MANNHEIM TYPE SLIDE RULES

STUDENTS' SLIDE RULES

For school use and beginners. An inexpensive slide rule that is useful for instruction purposes, made of polished boxwood and accurately divided.



No. 1440

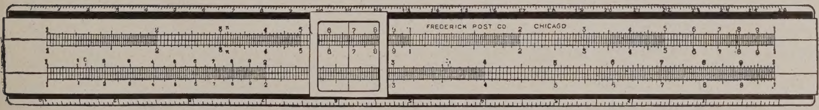
No. 1440. High School Mannheim Slide Rule, 10-inch, boxwood with A, B, C, D and log scale celluloid indicator, engine-divided, in case. .... Each,

1442. High School Mannheim Slide Rule, 10-inch, celluloid. The same as above, but of mahogany wood with celluloid facings, glass indicator, metal frame and with inch and centimeter scales on ruling edges, in case..................................Each,

1444. Students' Mannheim Slide Rule, 10-inch, boxwood. Same as the High School Rule, No. 1440, with sine and tangent scales added on back of slide, in case..................................Each,

1446. Students' Mannheim Slide Rule, 10-inch, celluloid. Same as No. 1442 but with sine and tangent scales added to back of slide, in case. .... Each,

MANNHEIM ADJUSTABLE SLIDE RULES



No. 1449

Same as the Students' Mannheim Celluloid No. 1446, but of adjustable construction with new rimless indicator.

No. 1448. 5-inch length, in case ....Each,
1448L. 5-inch length, in leather case ....
1449. 10-inch length, in case ....
1449L. 10-inch length, in leather case ....
1450. 20-inch length, in case ....
1450L. 20-inch length, in leather case ....

Directions with Each Slide Rule

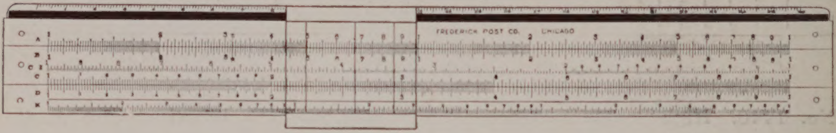
MANNHEIM TYPE SLIDE RULES

MULTIPHASE SLIDE RULES

Have same construction as the Mannheim Adjustable, but have an extra inverted scale on the slide and a cube scale on the body.

The inverted scale of the Multiphase Rule permits performing multiplication or division, or both, with three numbers in **one** setting.

The cube scale permits the operator to find cubes and cube roots, squares and square roots, three-halves and two-thirds powers, also many higher powers, all with ease.

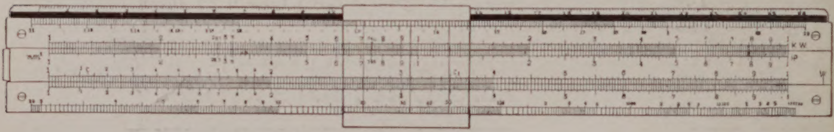


No. 1452

No. 1452. 10-inch length, in case ....Each,
1452L. 10-inch length, in leather case ....
1454. 20-inch length, in case ....
1454L. 20-inch length, in leather case ....

ELECTRICAL SLIDE RULE

Post's Electrical Slide Rule differs from the No. 1449 Mannheim Adjustable in that it has a two-fold log log scale on its face, dynamo and motor efficiency scales in the groove, and special gauge markings permitting easy determinations of the electric resistance of copper wire of various gauges, under various conditions, and making most horse power, kilowatt, volt and ampere computations a matter of one setting of the slide rule.

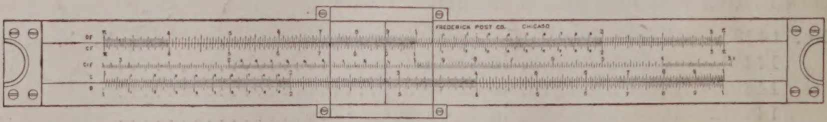


No. 1456

No. 1456. 10-inch length, in case ....Each,
1456L. 10-inch length, in leather case ....

MULTIPHASE DUPLEX SLIDE RULE

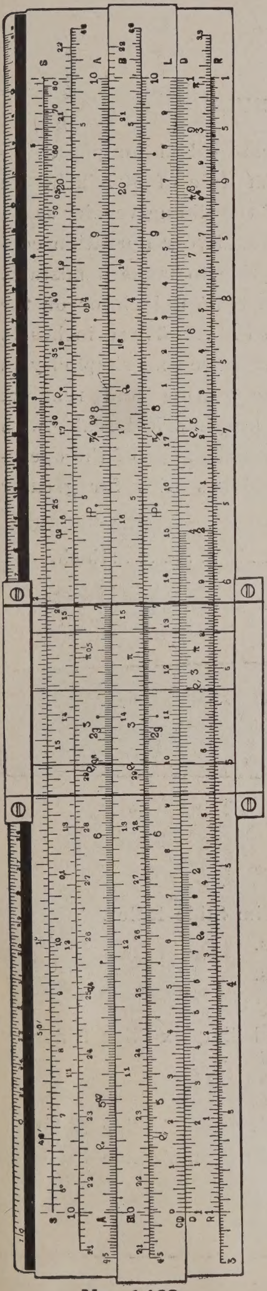
In this rule the scales of the Multiphase are supplemented by single-fold and single-fold inverted scales, enabling computations involving many factors in fewer settings of the slide rule, and making resetting of the slide almost entirely unnecessary. Both faces of the rule are graduated.



No. 1458

No. 1458. 10-inch length, in case ....Each,
1458L. 10-inch length, in leather case ....

Directions with Each Slide Rule



No. 1463

RITOW SLIDE RULES

These slide rules combine simplicity of operation with double, triple, ten-fold, fifty-fold and one-hundred-fold accuracy.

With these rules every slide rule computation can be independently checked, and power and root computations are greatly simplified and are of at least double the accuracy of the same computations on Mannheim Type Slide Rules of the same length.

All **RITOW** Slide Rules are protected by patents in the principal countries of the world.

RITOW MANIFOLD SLIDE RULE

RITOW Manifold Slide Rules are provided with engine-divided scales, single-length, double-length, triple-length folded scales, inverted scale, sine, tangent and logarithmic scales, inch and centimeter scales. Can do everything the Multiphase Slide Rule does, but with double and triple accuracy. Gives any trigonometric function with one setting (sine, co-sine, tangent, co-tangent, secant, co-secant). Gives all the roots and powers that correspond at one setting of the indicator. Reduces most computations to the A 10-inch Manifold, has the accuracy of a 30-inch Mannheim Slide Rule, and contains in every computation with the three-fold scales an independent check. Computations on the Manifold are much simpler than on the Mannheim Rule.

It has manifold scales, manifold accuracy, manifold advantages and manifold uses.

RITOW Students' Manifold, boxwood, engine-divided, with celluloid indicator.

No. 1463. 10-inch length, in case...Each,

Directions with Each Slide Rule

RITOW MANIFOLD, celluloid facing, adjustable construction, with new rimless indicator.

No. 1464.	5-inch length, in case......Each,
1464L.	5-inch length, in leather case
1465.	10-inch length, in case......
1465L.	10-inch length, in leather case
1466.	20-inch length, in case......
1466L.	20-inch length, in leather case

RITOW SLIDE RULES

RITOW CYLINDRICAL SLIDE RULE

The **RITOW** Cylindrical Slide Rule is the accurate calculator par excellence. It has an accuracy greater than a Mannheim Rule of 500 inches in length, as the last figure can be read with the help of the sliding vernier scale. Answers obtained to six and seven significant figures. Every operation contains an independent check, and it is almost impossible to make a mistake. Although occupying much less room than the "Thacher" Calculator or the "Fuller" Slide Rule, it is much more accurate than either. Three inches in diameter, 12 inches long, machine-mounted cylinders, ease and simplicity in operation. Special construction enabling accurate setting and reading. Magnifying index 500-inch helical scale and 10-inch cylindrical scale, with scale of logarithms on one cylinder. This slide rule can do most of the operations performed by very expensive calculating machines with far greater convenience and more speed.

No. 1475. In Polished wood case............................Each,

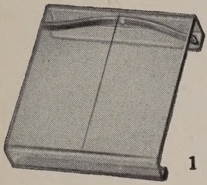
SLIDE RULE CASES

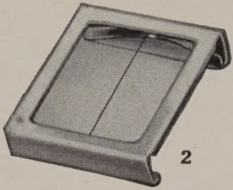
Leatherette—for High School and Students' Mannheim Slide Rules.
Leatherette—case for Manifold Slide Rule, 10 inches.
Leatherette—case for Manifold Slide Rule, 20 inches.
5-inch Leather case—for Multiphase Slide Rule.
10-inch Leather case—for Multiphase or Duplex and Simplex Slide Rules.
20-inch Leather case—for Multiphase Slide Rules.
5-inch Leather case—for 5-inch Manifold.
10-inch Leather case—for Manifold and Log Log Merchants' Slide Rules.
20-inch Leather case—for Manifold and Log Log Merchants' Slide Rules.

Directions with Each Slide Rule

SLIDE RULE SUNDRIES

INDICATORS


1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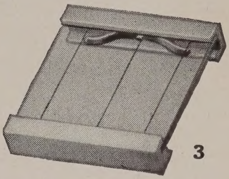
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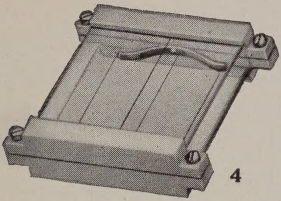
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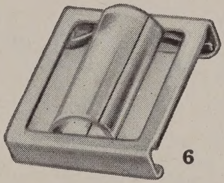

6

We make seven types of indicators (runners of cursors):

Type No. 1

Celluloid indicator, used only with the boxwood slide rules........Each,

Type No. 2

Glass indicator, metal rim, used with Students' and High School Slide Rules. .... Each,

Type No. 3

New rimless indicator, glass imbedded in celluloid; used with our adjustable slide rules. In three sizes:

For Mannheim Type Slide Rules........................Each,
For **RITOW** Manifold Slide Rules.........................
For **RITOW** Log Log Merchants' Slide Rules...............
For 5″ Rules. Each.... For 10″ Rules. Each.... For 20″ Rules. Each,

Type No. 4

Duplex indicator, for Duplex Type Slide Rules, in three sizes:

For Duplex Multiphase
For Duplex Manifold
For Simplex Merchants' Type Slide Rule

Type No. 5

SIMPLEX INDICATORS

For Simplex Merchants' Log Log
For Simplex Ritow Manifold

Type No. 6

Our sixth type of indicator is the magnifying type.

For Adjustable Mannheim Rules
For Multiphase
For Manifold
For Merchants' Log Log

Type No. 7

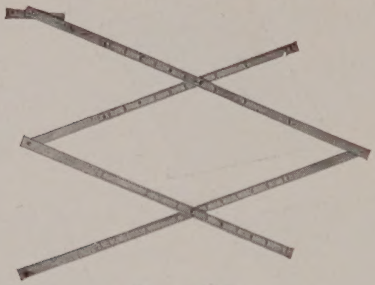
A very long (12 inches) indicator for the cylindrical slide rule.

SLIDE RULE MANUALS

No. 1. Elementary Slide Rule Manual
2. A self-instructing text book, with exercises for beginners. For use with slide rules of all makes. By H. Ritow.
3. **RITOW** Manifold Slide Rule Instruction Manual with exercises.
4. **RITOW** Merchants' Log Log Instruction Manual. For merchants and mathematicians. With exercises.

PANTOGRAPHS

For Enlarging and Reducing Drawings



No. 1496

Each

No. 1495. Pantograph, hardwood bars 17 in. long, for enlarging 10 ratios from size of original. This instrument is of simple construction and is recommended as an excellent means of familiarizing children the form and proportion, thereby assisting them in learning to draw from objects.........

Each

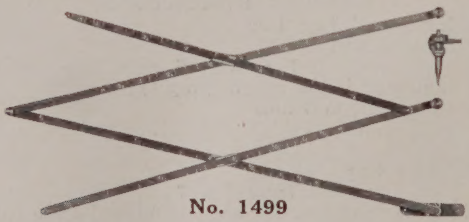
No. 1496. Pantograph, hardwood bars 21 in. long, for reducing and enlarging drawings in 25 ratios from size of original, wooden foot, metal tracer and lead point, metal rest, in box with directions.................................

Each

No. 1497. Pantograph, hardwood bars 21 in., polished, nickel-plated mountings, metal foot, ball rest, interchangeable needle point tracer and lead point in adjustable holders, for reducing and enlarging drawings in 34 ratios from size of original, in box with directions.......................

Each

No. 1498. Same ratios as No. 1497, but more desirable, due to precision so necessary in larger and more accurate work. 41-inch bars of maple, mahogany lined, with bolts and knurled thumb nut joints...........................

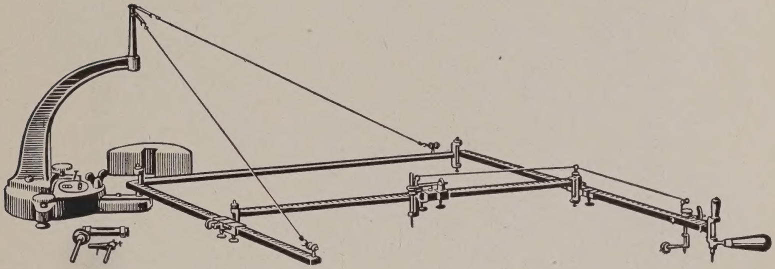


No. 1499

Each

No. 1499. A precision instrument made entirely of metal, heavily nickel-plated; length, 16 inches; bars are fastened with sliding clamps skilfully designed, making adjustments practically instantaneous. Proportions range from 1⅛ to four times the original. Tracer and lead points easily interchanged. Direction sheet with each Pantograph.....

POST'S SUSPENDED PANTOGRAPHS



No. 1500.

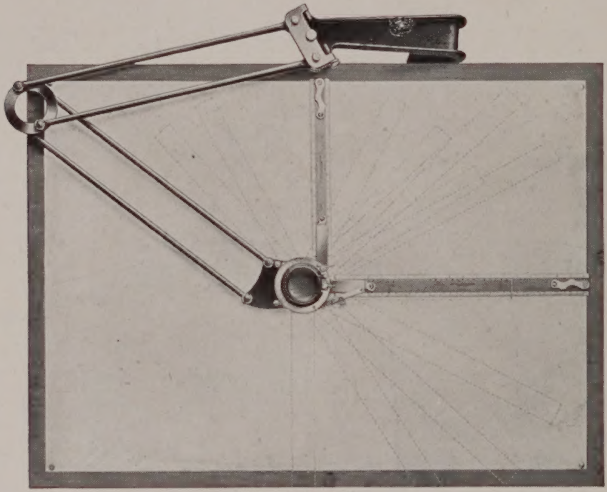
A precision pantograph which will produce accurate enlargements or reductions in all ratios between 1 to 20 and 4 to 5.

The bars are of square, nickel-plated brass tubing. The graduations are marked in millimeters. The bars are hinged to the standard by two wires and are supported on the table by a small roller, attached to the bar near the tracer pin. The joints are formed by smooth steel bearings that insure movements without jerking or jamming. The contours of the original can be traced with ease and accuracy. The standard is supported by a heavy iron base which may be placed at any position on table or drawing surface. Base weighs approximately 50 pounds.

POST'S SUSPENDED PANTOGRAPH Is Supplied in Two Sizes:

	Each
No. 1500 with 33″ bars......................................	
1501 with 38″ bars......................................	

UNIVERSAL DRAFTING MACHINES



No. 1503-A.

For all kinds of

Mechanical Drawing
Structural Drafting
Map Work and Plotting
Reading Courses on Navigation Charts
Torpedo Fire Control
Engraving and Designing
Architectural Drafting
Gun Fire Control
Blackboard Work
College and School Work

USED IN ALL PARTS OF THE WORLD

The accuracy, speed and time and energy-saving qualities of these machines are generally recognized and little need be said in explanation. A Universal Drafting Machine consists of two parallelograms, a protractor and a square having graduated ruling edges. The two parallelograms joined together constitute an arm, which, anchored to the board, gives the protractor and square a parallel motion about the drawing.

Two Types of Machines. Corner Anchor and Mid Anchor. The Corner Anchor fastens the machine to the upper left-hand corner of the board, which should be 7 inches longer than the drawing, to allow sufficient clearance. The Mid Anchor type, which is illustrated above, requires no clearance at the end of the board, and is usually over-hung so that the vertical scale can pass beneath, when working at the upper edge of the drawing.

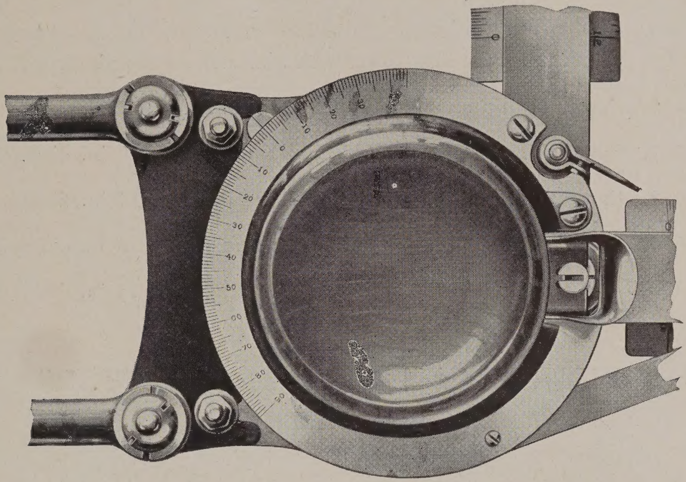
Tubular Rod. The Ball Bearing Tubular Rod Machines have absolutely no play in the bearings and are frictionless; they are light in weight and possess great rigidity. Practically troubleproof.

Solid Rod. The Hardened Joint Solid Rod Machines are hardened, ground and polished, straight cylindrical pins working in hardened, ground and polished bearings, and if properly lubricated and kept free from dirt, they will give many years of good service.

Scales. The Scales used with these machines are made especially for this purpose, being somewhat wider than ordinary scales and the number reads from the protractor end of the scales.

See Next Page for Sizes and Graduations.

UNIVERSAL DRAFTING MACHINE AND ACCESSORIES



This Standard Protractor Furnished with Each Machine.
Architect's or Civil Engineer's Protractor Can Be Supplied at Extra Cost.

No. 1503. Corner Anchor type, for drawings 18x24, 24x36 and 30x42 in., hardened joint, solid rods, with standard protractor; without scales or straight edges..........................Each,

1503A. Mid-Anchor type, for drawings 24x36, 30x42 and 36x50 in., hardened joint, solid rods, with standard protractor; without scales or straight edges..........................Each,

1504. Corner Anchor type, for drawings 18x24, 24x36 and 30x42 in., ball bearing tubular rods, with standard protractor; without scales or straight edges..........................Each,

1504A. Mid-Anchor type, for drawings 24x36, 30x42 and 36x50 in., ball bearing tubular rods, with standard protractor; without scales or straight edges..........................Each,

FLAT WHITE EDGE BOXWOOD SCALES

No. 1505A.	6	inches	long..	Each,
1505B.	12	"	"	"
1505C.	18	"	"	"
1505D.	24	"	"	"

Above can be supplied with any of the following graduations:

No. 1. ⅜, ¾, 1½, 3 in. to ft.
No. 2. ⅛, ¼, ½, 1 in. to ft.
No. 3. Full divided ½x1 in. to inch.
No. 4. 10x50 to inch.
No. 5. 20x40 to inch.
No. 6. 30x60 to inch.

STRAIGHT EDGES

Ebony	Maple Lined	Transparent Lined
No. 1506A. 12-inch.	No. 1507A. 12-inch.	No. 1508A. 12-inch.
1506B. 18-inch.	1507B. 18-inch.	1508B. 18-inch.
1506C. 24-inch.	1507C. 24-inch.	1508C. 24-inch.
1506D. 36-inch.	1507D. 36-inch.	1508D. 36-inch.

No. 1508½. Center Pull Thumb Tacks.

CIRCULAR PAPER PROTRACTORS

No. 1509. Circular Protractors, 8 inches diameter, in ¼ degrees, printed on drawing paper, with numbers reading both ways. Each,

1510. Same, 14 inches diameter ....

1511. Same as No. 1509, printed on Bristol board, 8 in. diameter

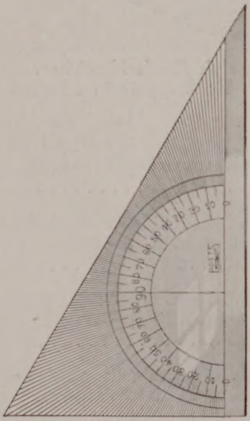
1512. Same as No. 1510, printed on Bristol board, 14 in. diameter

1513. Same as No. 1510, printed on Tracing paper, 8 in. diameter

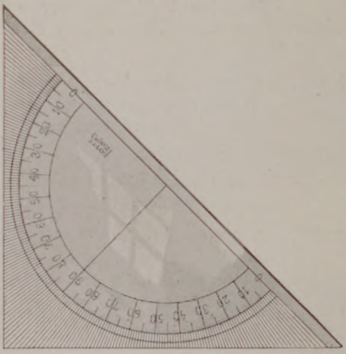
1514. Same as No. 1510, printed on Tracing paper, 14 in. diameter

TRIANGLE CELLULOID PROTRACTORS

TRANSPARENT



No. 1520



No. 1523

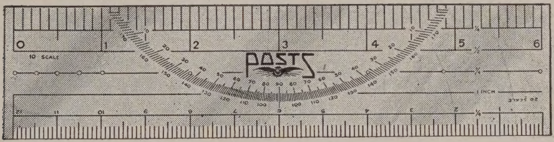
					Each
No. 1520.	Triangle Celluloid Protractor,	30°×60°,	5 inch,	div. to 1°	
1521.	“ “ “	30°×60°,	6 “	“ 1°	
1522.	“ “ “	30°×60°,	7 “	“ 1°	
1523.	“ “ “	45°,	5 “	“ 1°	
1524.	“ “ “	45°,	6 “	“ 1°	
1525.	“ “ “	45°,	7 “	“ 1°	

THE TRANSPARENT PARALLEL FLEXIBLE RULER AND SCALE PROTRACTOR

These Rulers are made of transparent celluloid of just sufficient thickness to be perfectly flexible. Lines can be drawn parallel with, or at any desired angle to each other without measuring. Civil and Mechanical Engineers, Surveyors and Architects will find them very convenient for recording field notes and making sketches.

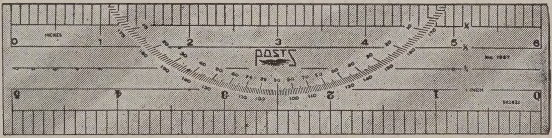
FOR CIVIL ENGINEERS AND SURVEYORS

One-Half Actual Size



No. 1526.

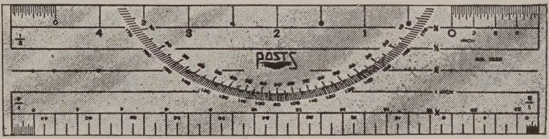
No. 1526. Divided 10 and 20 parts to the inch.............Each, ...Dozen.
1526A. Divided 20-40 parts to inch.
1526B. Divided 10-50 parts to inch. Other graduations can be furnished on special order. Write for prices.



No. 1527.

No. 1527. Transparent, Parallel, Flexible Ruler and Scale Protractor. Divided in 100 parts to the foot, 10 parts to the inch...............Each................Dozen.

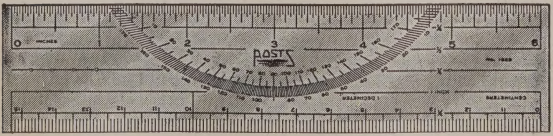
FOR ARCHITECTS AND MECHANICAL ENGINEERS



No. 1528.

No. 1528. For Architects and Mechanical Engineers. Divided ⅛, ¼, ½, 1. ....Each. ....Dozen.

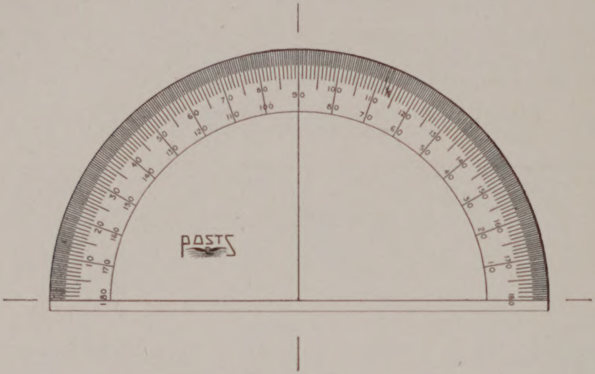
FOR GENERAL USE



No. 1529.

No. 1529. For Students of Mathematics, Schools, etc. Divided 8ths, 16ths, 32ds, Centimeters. ....Each. ....Dozen.

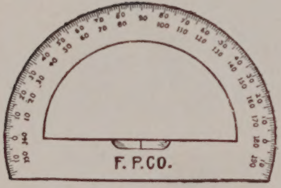
TRANSPARENT CELLULOID PROTRACTORS



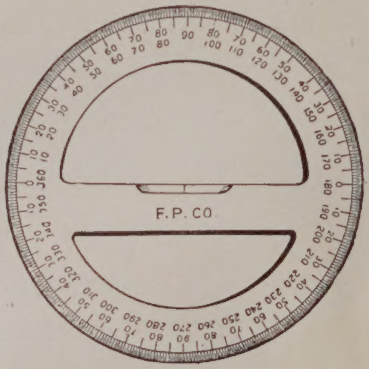
No. 1532.

No.			Each
No. 1530.	Semicircular	Celluloid Protractor, 4 inches diameter, ½°	
1531.	Semicircular	Celluloid Protractor, 5 inches diameter, ½°	
1532.	Semicircular	Celluloid Protractor, 6 inches diameter, ½°	
1533.	Semicircular	Celluloid Protractor, 7 inches diameter, ½°	
1534.	Semicircular	Celluloid Protractor, 8 inches diameter, ½°	
1534A.	Circular	Celluloid Protractor, 6 inches diameter, ½°	
1534B.	Circular	Celluloid Protractor, 8 inches diameter, ½°	

WITH BEVELED EDGES



No. 1535-1535A.

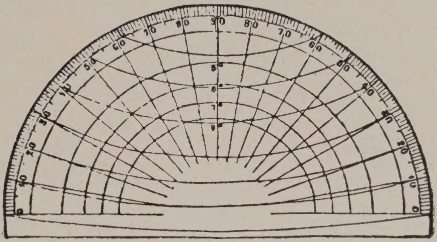


Nos. 1535B-1535D.

No.			Each
No. 1535.	Semicircular	Amber Protractor, beveled edge, 6 in., ½°	
1535A.	Semicircular	Amber Protractor, beveled edge, 8 in., ½°	
1535B.	Circular	Amber Protractor, beveled edge, 6 in., ½°	
1535C.	Circular	Amber Protractor, beveled edge, 8 in., ½°	
1535D.	Circular	Amber Protractor, beveled edge, 10 in., ½°	

RAILROAD CURVE PROTRACTORS

TRANSPARENT

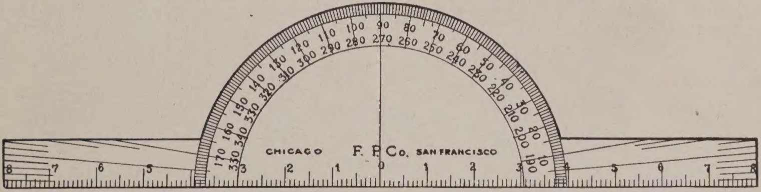


No. 1536A.

No. 1536. Amber Railroad Curve Protractor, 8 in., divided to half degrees, with circular Curves ½°, 1°, 1½°, 2°, 2½°, 3°, 3½°, 4°, 5°, 6°, 7°, 8°, scale 400 feet—1 inch........ Each

1536A. Amber Railroad Curve Protractor, 10 in., divided to half degrees, with circular Curves 1°, 1½°, 2°, 2½°, 3°, 3½°, 4°, 5°, 6°, 7°, 8°, 10°, 12°, 14°, 16°, 18°, 20°, scale 100 feet—1 inch ....

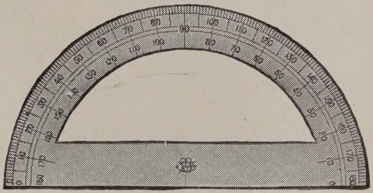
TRANSPARENT PLOTTING PROTRACTORS



No. 1536B.

No. 1536B. Transparent Plotting Protractor, with arms 8 inches long. .Each,

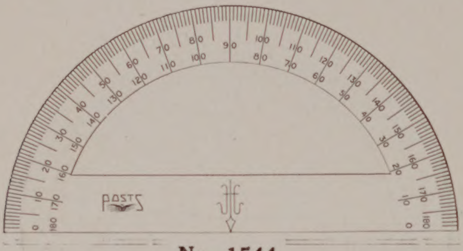
CARDBOARD PROTRACTORS



No. 1537.

No. 1537. Cardboard Protractors. This instrument is four inches in diameter and is made from cardboard prepared expressly for this purpose and graduated with a very accurately engraved die. ....Per dozen,

BRASS AND NICKEL SILVER PROTRACTORS



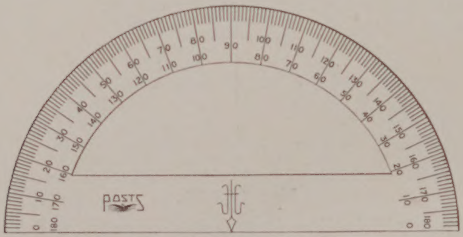
No. 1544.

No. 1544. Semicircular, Brass, Fine Quality, 3¾″ diameter, 1°, Each,

1545. Semicircular, Brass, Fine Quality, 4¼″ diameter, 1°

1546. Semicircular, Brass, Fine Quality, 5″ diameter, ½°

1547. Semicircular, Brass, Fine Quality, 6⅜″ diameter, ½°



No. 1548

PROTRACTORS FOR SCHOOL USE

No. 1548. Semicircular, Nickeled, 3″ diameter, 1°...... Each,

1549. Semicircular, Brass, 3⅝″ diameter, 1°......

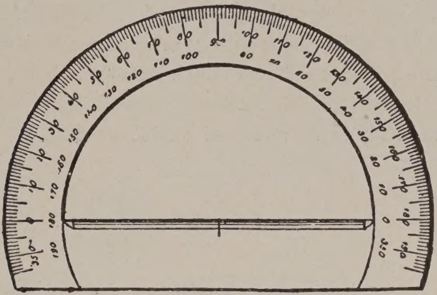
1551. Semicircular, Brass, 3½″ diameter, 1°......

1552. Semicircular, Brass 4¼″ diameter, 1°......

1553. Semicircular, Aluminum, 5½″ diameter, ½°......

1554. Semicircular, Brass, 5½″ diameter, ½°......

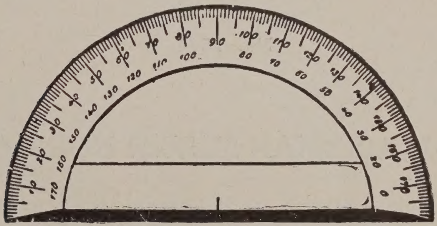
PRIMO METAL PROTRACTORS



No. 1560.

CENTER ON INNER EDGE

No. 1560. Semicircular, German Silver, beveled edge, 1°, 4″....Each,
1561. Semicircular, German Silver, beveled edge, ½°, 5″....
1562. Semicircular, German Silver, beveled edge, ½°, 6″....
1563. Semicircular, German Silver, beveled edge, ¼°, 6″....



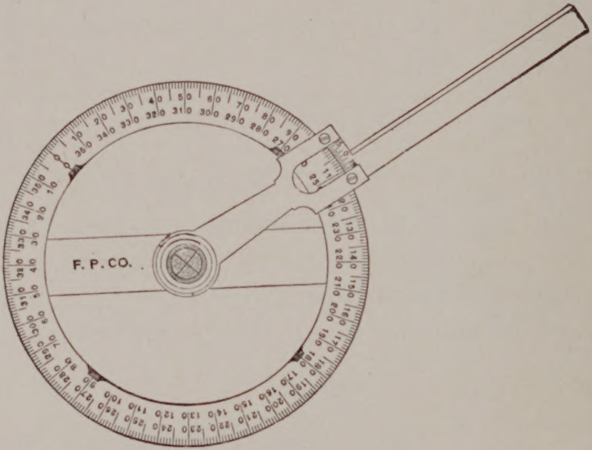
No. 1564.

CENTER ON OUTER EDGE

No. 1564. Semicircular, German Silver, beveled edge, 1°, 4″....Each,
1565. Semicircular, German Silver, beveled edge, ½°, 5″....
1566. Semicircular, German Silver, beveled edge, ½°, 6″....
1567. Semicircular, German Silver, beveled edge, ¼°, 6″....
1568. Semicircular, German Silver, beveled edge, ½°, 7″....
1570. Semicircular, German Silver, beveled edge, ½°, 8″....

PRIMO ARM PROTRACTORS

These Protractors are accurately graduated and finished so that angles can be drawn or measured within the accuracy of the smallest vernier unit. With these instruments one can lay off and check surveys, plans, maps, trigonometric and graphic mathematical calculations, regular inscribed polygons of any number of sides, star-shaped figures and varied geometric designs.



No. 1571.

CIRCULAR, GERMAN SILVER HORN CENTERS

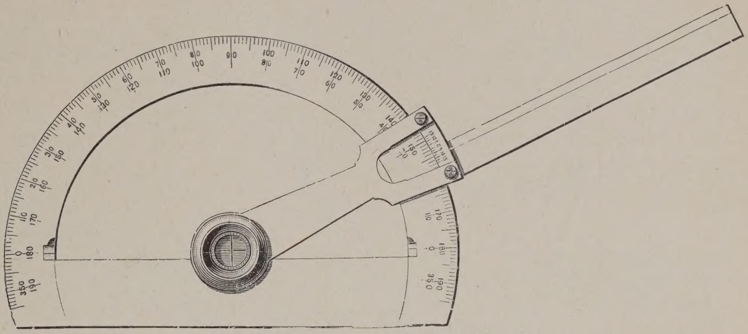
	Diameter	Degree	Arm	Vernier Opening	Vernier Reading	Each
No. 1571.	5½″	½°	5″	1¼″	3 Minutes	
1572.	8″	¼°	6″	1⅜″	1 Minute	
1573.	10″	¼°	6½″	1⅜″	1 "	

1571C. Same as No. 1571 but in Morocco, velvet-lined case......

1572C. Same as No. 1572 but in Morocco, velvet-lined case......

1573C. Same as No. 1573 but in Morocco, velvet-lined case......

SEMICIRCULAR GERMAN SILVER HORN CENTERS



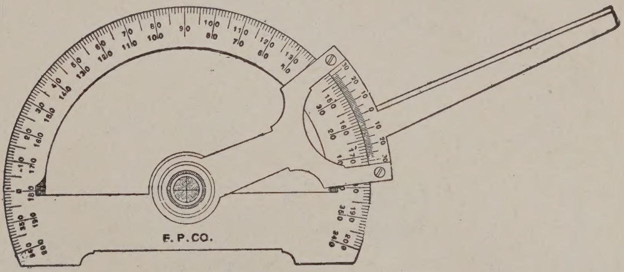
No. 1574.

	Diameter	Degree	Arm	Vernier Opening	Vernier Reading	Each
No. 1574.	5½″	½°	5″	1¼″	3 Minutes	
1575.	8″	¼°	6″	1⅜″	1 Minute	
1576.	10″	¼°	6½″	1⅜″	1 "	

Above in Morocco, velvet-lined cases.

No. 1574C. Each..... No. 1575C. Each..... No. 1576C. Each.....

SEMICIRCULAR GERMAN SILVER HORN CENTERS



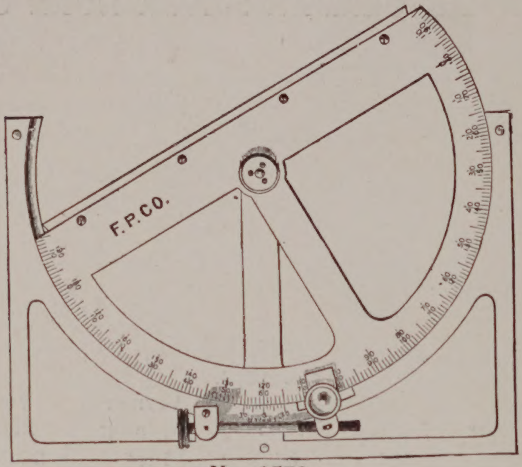
No. 1577A.

The vernier openings are twice the width of those in protractors Nos. 1575 and 1576. The graduations also have twice the spread, eliminating the chance of error in reading.

	Diameter	Degree	Arm	Vernier Opening	Vernier Reading	Each
No. 1577A.	8″	½°	6″	2¾″	1 Minute	
1577B.	10″	½°	6½″	2¾″	1 "	

Above in Morocco, velvet-lined cases.

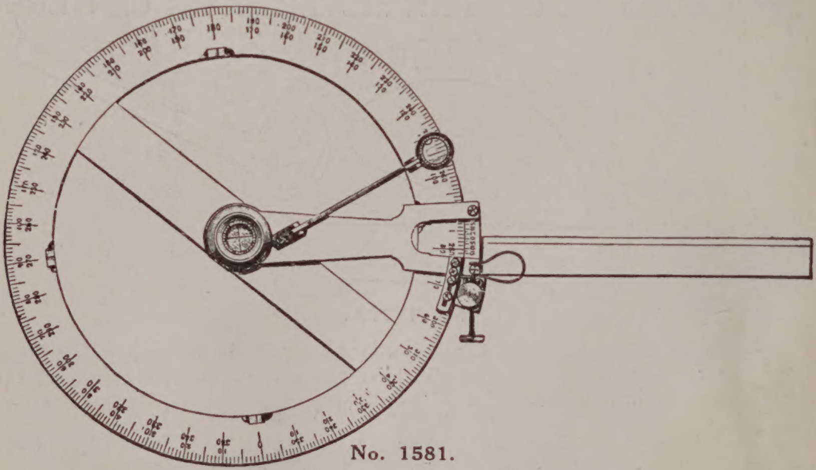
No. 1577A-C. Each........ No. 1577B-C. Each........



No. 1579.

No. 1579. Crozet Protractor, 8″, German Silver, divided to ¼°, vernier reading to 1 minute, with tangent screw, in polished mahogany case.......................................Each,

This is a very practical protractor. It is used along a straight edge or T-square and angles are set off without bringing the center over the starting point.

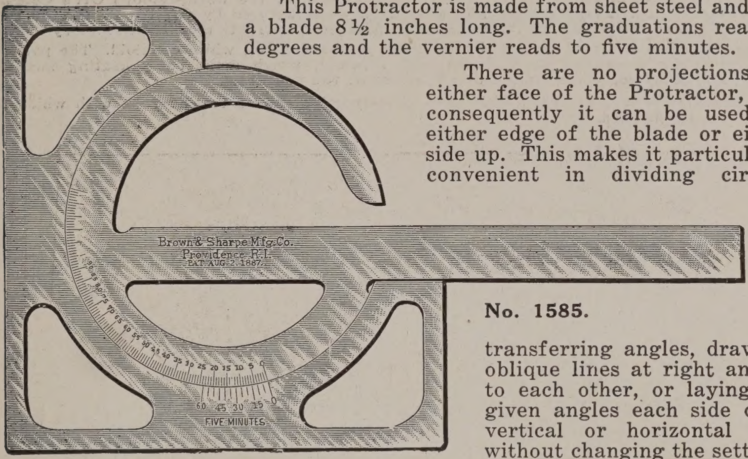


No. 1581.

No. 1581. Circular, German Silver, ¼°, 8″ diameter, vernier reading to 1 minute, with clamp screw, micrometer adjustment screw to vernier and magnifying lens.....................Each,

1581C. In morocco, velvet lined case..................... "

DRAFTSMAN'S PROTRACTOR



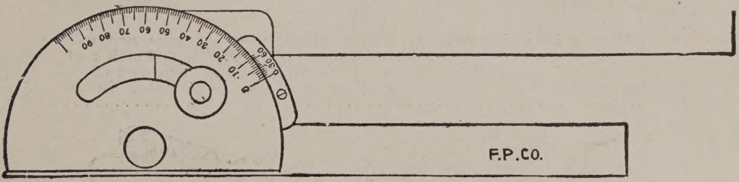
No. 1585.

This Protractor is made from sheet steel and has a blade 8½ inches long. The graduations read to degrees and the vernier reads to five minutes.

There are no projections on either face of the Protractor, and consequently it can be used on either edge of the blade or either side up. This makes it particularly convenient in dividing circles, transferring angles, drawing oblique lines at right angles to each other, or laying off given angles each side of a vertical or horizontal line without changing the setting.

No. 1585. Draftsman's Steel Protractor, with directions........Each,
1586. Draftsman's Steel Protractor, in mahogany case...... "

DRAFTSMAN'S STEEL PROTRACTOR



No. 1587A.

No. 1587. Draftsman's Steel Protractor....................Each,
1587A. Draftsman's Steel Protractor, in mahogany case.... "

This Protractor has blades about 9 inches long. The arc is of 4-inch diameter, graduated to degrees, with a vernier reading to 5 minutes. It has a clamping screw which securely holds the blades at any angle and also serves as a knob.

Either blade can be used in contact with T-square, giving any angle and its complement from 0° to 90°.

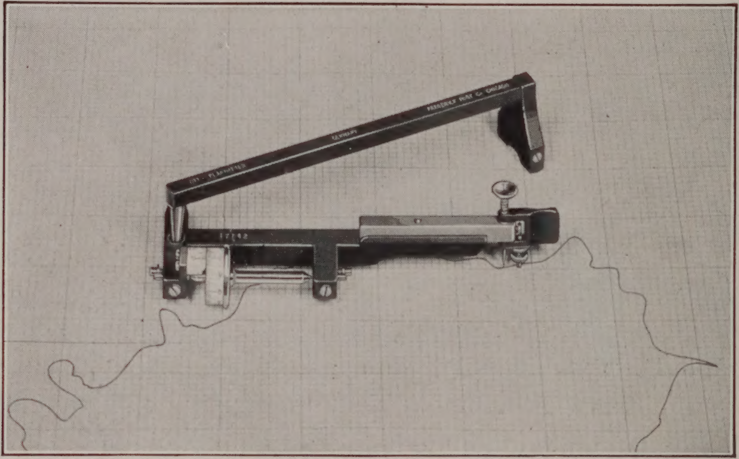
It forms a perfect adjustable triangle and is a well-finished and reliable tool of best workmanship. It has been designed for the draftsman's use and its uses as a Protractor are practically unlimited.

COMPENSATING POLAR PLANIMETERS

We are general distributors for U. S. A. and Canada of the world-famous **Ott's Compensating Planimeters.** These Planimeters have been manufactured by Ott for more than forty years. They are renowned for their accuracy, finished construction and satisfactory service.

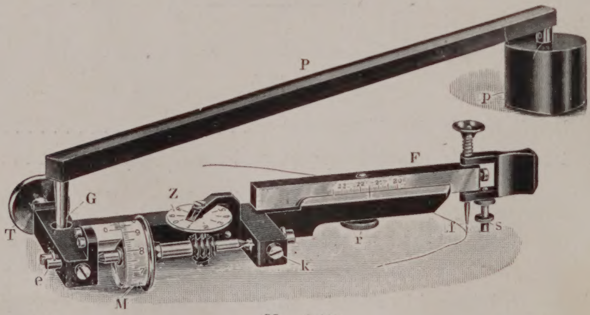
The roller has a rim of tempered steel, with graduations on white celluloid. The pole and tracer arms are connected by ball and socket joints, which make **compensating** measurements possible by correcting faults of alignment of the two arms.

Each instrument is provided with book of instructions and a testing rule, with which any setting can be checked.



No. 1590

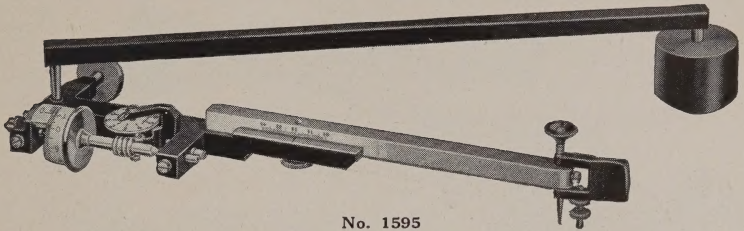
No. 1590. **Compensating Polar Planimeter.** The smallest, most compact and most economical Planimeter on the market, still retaining Ott's accuracy, finish and reliability, reads to 0.0155 square inches (0.1 sq. cm.). Range equals area of ring between circles 2 inches and 18 inches in diameter. Case, 6x2¼x1¾ inches. Weight, 11 oz...Each,



No. 1592

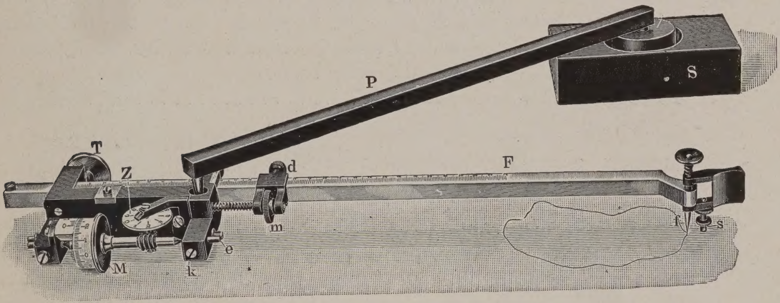
No. 1592. Compensating Polar Planimeter with **short** tracer arm, reading to 0.01 square inches. Used for measuring areas of plans, maps, diagrams, etc., drawn to small scale. Range equals area of ring between circles of 23 inches and 8 inches in diameter. Needle pole. Case, 9x4x2 inches. Weight, 1¼ lbs..........Each,

COMPENSATING POLAR PLANIMETERS



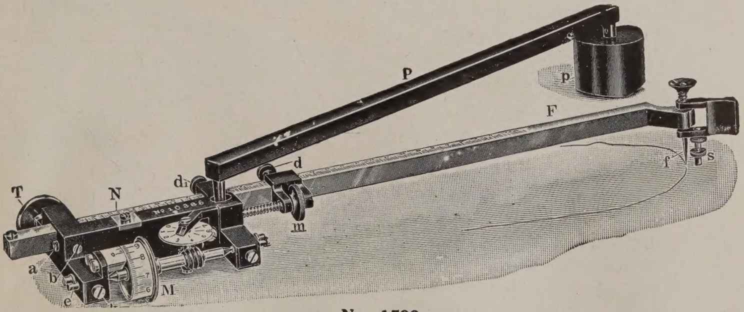
No. 1595

No. 1595. The same as No. 1592, but with long tracer arm reading to 0.0155 sq. in. (0.1 sq. cm.); used to measure areas of plans drawn to a large scale; of diagrams of recording steam meters, watt meters, water meters, tide and pressure gauges, etc., and of indicator diagrams. Range equals that of a ring between circles 28 in. and 6½ in. in diameter. Case, 9x4x2 in. Weight, 1¼ lbs. ....Each,



No. 1597

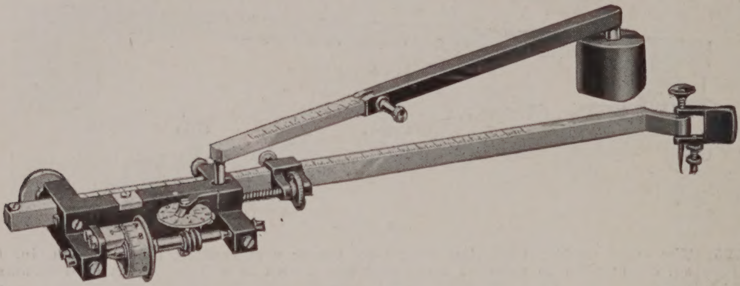
No. 1597. Compensating Polar Planimeter with graduated tracer arm; can be adjusted to read anywhere between 0.0155 and 0.003 sq. in. (or 0.1 to 0.02 sq. cm.). Tangent screw adjustment. Special graduations to read in English or metric units. Ball pole. Case with table of settings and zero circle constant. Adjusting screw to set axes of roller and tracer arm parallel. Range (with ordinary pole area) equals area of ring between circles of 28 and 6½-inch diameters. Case, 11x4x2 inches. Weight, 1⅞ lbs...Each,



No. 1599

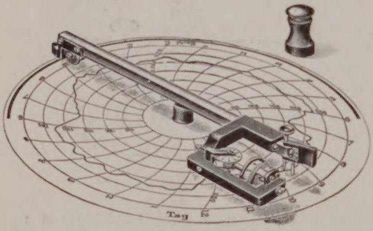
No. 1599. Same as No. 1597, but with needle pole. Case, 10x4x2 inches. Weight, 1½ lbs. ....Each,

COMPENSATING POLAR PLANIMETERS



No. 1690

No. 1600. Like No. 1599, but with an extensible pole arm. Length of arm adjustable between 5 inches and 9 inches. Large or small areas can be accurately measured with this instrument, by simply reducing the length of pole and tracer arms.
In case with directions..........................Each,



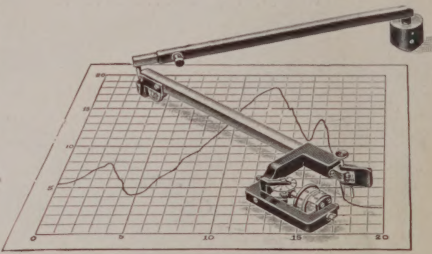
No. 1605

RADIAL PLANIMETER

No. 1605. The tracer arm alone, with center slide pivot, forms a Radial Averager reading to 0.0004 in. (0.001 cm.), with a range up to 6½-inch radius. Center slide pivot for circular charts is ½-inch in diameter...Each,

POLAR PLANIMETER

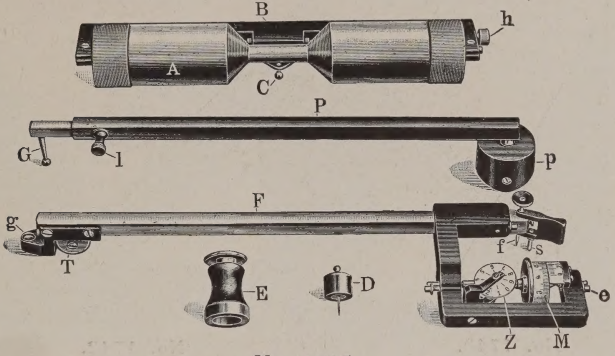
No. 1610. This instrument is the tracer arm of Radial Planimeter No. 1605, arranged with an extensible pole arm, forming a Polar Planimeter reading to 0.02 square inches, and has a range between concentric circles of 29-in. and 5-in. diameters. Has same reading and range limits as No. 1605, when used as Radial Averager
In case, 10x3½x2 inches.
Weighs 1½ lbs. Each,



No. 1610

POLAR PLANIMETER

COMPENSATING POLAR PLANIMETERS

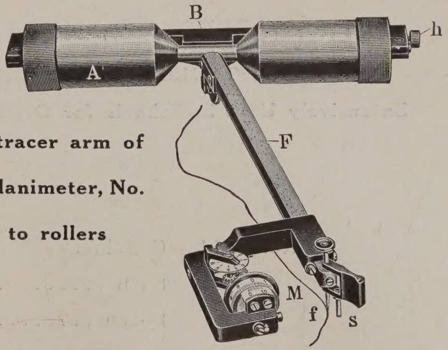


No. 1615.

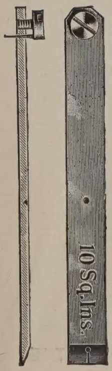
UNIVERSAL PLANIMETER

No. 1615. Universal Planimeter (compensating), though essentially a polar planimeter, is designed not only to measure areas, but to measure the average radius (or meter reading) of circular charts or diagrams of clock-recording meters or gauges, or with the roller attachment to measure the area or average reading of a long strip, diagram or chart. The Universal is a combination of the polar, "radial averager" and roller planimeters.

In case, 8¾x6½x2¼. Weight, 5 lbs. . . . . .Each,



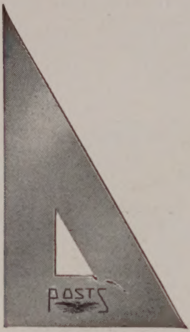
Illustrating tracer arm of the Universal Planimeter, No. 1615, attached to rollers



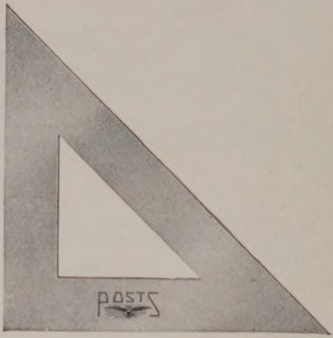
PLANIMETER TESTING RULE

To enable the user of a planimeter to always be in a position to quickly and correctly test its adjustment, a testing rule is supplied with each instrument. How to make this test is fully explained in the book of directions that comes with each planimeter. Furnished with all planimeters except Nos. 1590, 1605, 1610 and 1615.

TRANSPARENT VERDOID TRIANGLES



No. 1740.



No. 1742.

Transparent Verdoid Triangles are made of **VERDOID**, a hard, transparent, green material which casts no shadow and rests the eye. On profile and cross-section work, the orange-colored lines appear black, thus giving greater definition and accuracy.

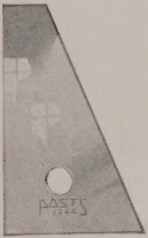
No. 1740. Medium weight, 30x60 degrees.
Size in inches........................4 6 8 10 12

1742. Medium weight, 45 degrees.
Size in inches............................4 6 8 10

TRIANGLES, TRANSPARENT AMBER

McCAULEY'S LETTERING ANGLE

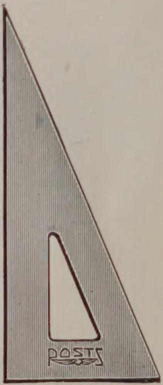
Extensively Used in Schools for Drawing Classes in Lettering



No. 1744.

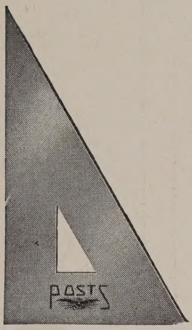
No. 1744. Celluloid
Each ....
Dozen ....

No. 1745. Transparent **Amber Triangle,** 22½°x67½°.
Size in inches.......4 6 8 10 12 14
Dozen ....
Each ....

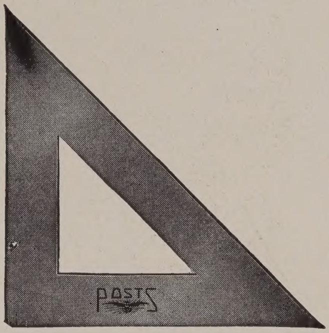


No. 1745.

TRANSPARENT TRIANGLES



[No. 1747.

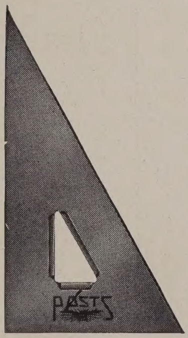


No. 1748.

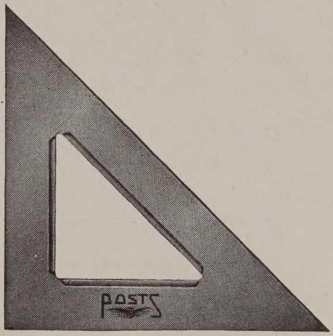
No. 1747. Triangles, 30x60 degrees, 65/1000 thick.
Size in inches............4 6 7 8 9 10 12 14

No. 1748. Triangles, 45 degrees, 65/1000 thick.
Size in inches................4 5 6 7 8 10 12

Professional Grade Angles



No. 1749.



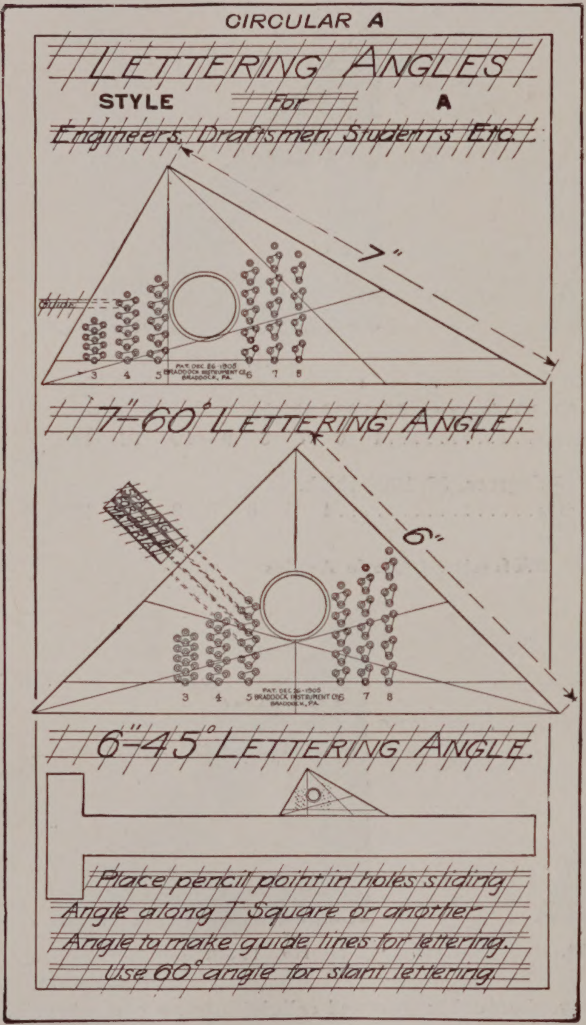
No. 1750.

Made of extra heavy, thoroughly seasoned celluloid; inner edges beveled.

No. 1749. Triangles, 30x60 degrees, 85/1000 thick.
Size in inches.............6 8 10 12 14 16 18

No. 1750. Triangles, 45 degrees, 85/1000 thick.
Size in inches..........4 6 8 10 12 14 16 18

"MULTI" LETTERING ANGLES


CIRCULAR A
LETTERING ANGLES
STYLE
For
A
Engineers, Draftsmen, Students Etc.
7"
Guide
3
4
5
6
7
8
PAT. DEC 26 1905
BRADDOCK INSTRUMENT CO.
BRADDOCK, PA.
7"-60° LETTERING ANGLE
6"
6"-45° LETTERING ANGLE
Place pencil point in holes sliding
Angle along T Square or another
Angle to make guide lines for lettering.
Use 60° angle for slant lettering

These Lettering Angles, which combine in themselves another instrument, have met with universal favor. They are of value to engineers, architects, draftsmen, students, artists, expert penmen and sign painters. They are useful to anyone requiring parallel lines at uniform spacings.

The lines scored across the "Multi" Lettering Angles enable one to obtain angles of 15°, 30°, 45°, 60°, 75° and 90° from either a 45° or 60° triangle, by setting these scored lines on horizontal or perpendicular lines on the drawing board. Descriptive folders sent with "Multi" Lettering Angles, showing the various uses in detail.

VALUE OF LETTERING ANGLES

The student, learning to draw, must make guide lines and slope lines for his lettering. Laying off with scale or dividers is slow work and difficult to get spaces uniform.

By using the "Multi" Lettering Angles, these spacing lines can be drawn uniformly and rapidly, requiring no practice to do so.

Engineers, architects, draftsmen and others find the Lettering Angles very useful when neat lettering is required, as few can letter neatly without guide lines. They appreciate the fact that this gives them the use of another instrument, without taking up more room on the crowded drawing board.

Style A, with Lines; Style B, without Lines

No. 1758.	"Multi" Lettering Angles, 30° x 60°. Style A. Size in inches	5	6	7	8	9
1759.	"Multi" Lettering Angles, 45°. Style A. Size in inches.....		5	6	7	8
1758½.	"Multi" Lettering Angles, 30° x 60°. Style B. Size in inches.	5	6	7	8	9
1759½.	"Multi" Lettering Angles, 45°. Style B. Size in inches.....		5	6	7	8

THE AMES LETTERING INSTRUMENT

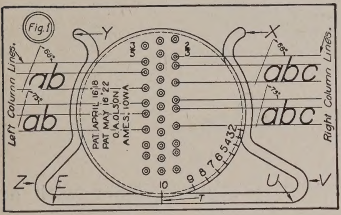


Fig.1
Y
X
Left Column Lines.
Right Column Lines.
ab
ab
abc
abc
68°
75°
PAT. APRIL 16'18
PAT. MAY 16'22
O.A. OLSON
AMES, IOWA
Z
E
U
V
T
10 9 8 7 6 5 4 3 2

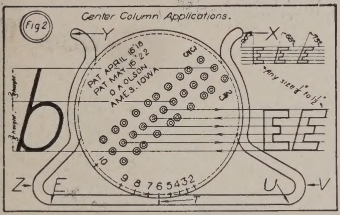


Fig.2
Center Column Applications.
Y
X
b
E
E
Any size to 1½"
PAT. APRIL 16'18
PAT. MAY 16'22
O.A. OLSON
AMES, IOWA
Z
E
U
V
T
10 9 8 7 6 5 4 3 2

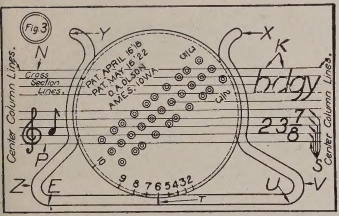


Fig.3
Y
X
N
K
Cross Section Lines.
Center Column Lines.
Center Column Lines.
bdgy
23 7/8
P
S
PAT. APRIL 16'18
PAT. MAY 16'22
O.A. OLSON
AMES, IOWA
Z
E
U
V
T
10 9 8 7 6 5 4 3 2

This unique and practical Instrument is in use in many leading universities, colleges, normal and high schools, trade schools and commercial drafting rooms throughout the country.

Its wide range of uses permits making guide lines for letters between 1/16 in. high and 1½ in. high.

Any number of guide lines from 1 to 4 can be easily and quickly drawn with the Ames Lettering Instrument.

Four guide lines make the Ames ideal for the student who is making his first attempt at lettering.

Each instrument has a full set of instructions that clearly defines, step by step, the use of this ingenious little device that shows the way to simple, legible lettering.

After this Ames Lettering Instrument has been used a little and you become more familiar with it, a great many different uses will be found.

For example: The center column may be used for cross sectioning, drawing bricks, siding shingles, etc.

Illustrations give some idea of its practical and convenient uses.

No. 1760 .... Each,

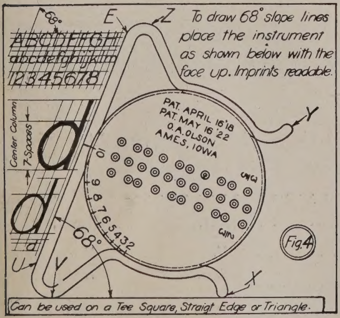


Fig.4

To draw 68° slope lines place the instrument as shown below with the face up. Imprints readable.

Can be used on a Tee Square, Straigt Edge or Triangle.
68°
E
Z
ABCDEFGH
abcdefghijklm
12345678
Center Column 7 Spaces
d
d
d
PAT. APRIL 16'18
PAT. MAY 16'22
O.A. OLSON
AMES, IOWA
10 9 8 7 6 5 4 3 2
68°
Y
U
V
X

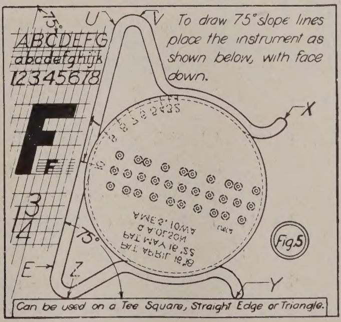
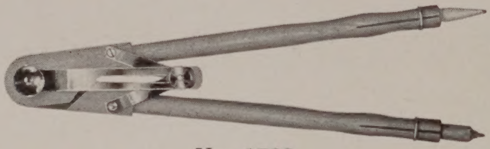


Fig.5

To draw 75° slope lines place the instrument as shown below, with face down.

Can be used on a Tee Square, Straight Edge or Triangle.
75°
U
V
ABCDEFG
abcdefghijk
12345678
F
F
3
4
X
75°
E
Z
Y

WOODEN BLACKBOARD DIVIDERS



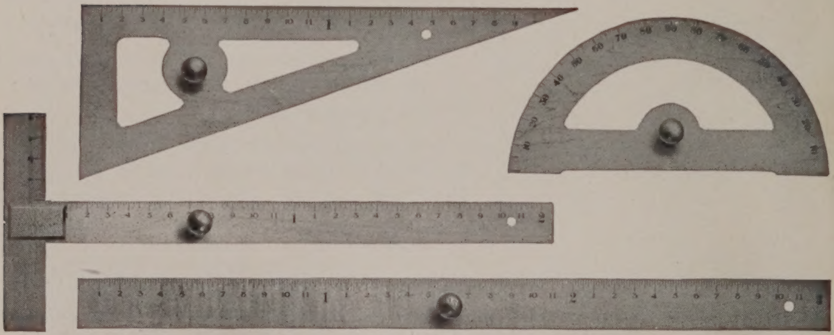
No. 1783

Post's Blackboard Dividers are furnished in two styles—either with or without locking device. Carefully made of varnished maple, one foot equipped with combination rubber tip and steel pivot point, the other with chalk receptacle and sliding ring fastener.

(Illustration shows Divider with locking device.)

No. 1780.	Blackboard Divider	12″.
1781.	" "	15″.
1782.	" "	18″.
1783.	(With locking device),	12″.
1784.	" " "	15″.
1785.	" " "	18″.

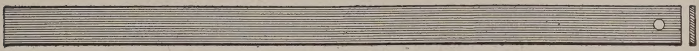
BLACKBOARD SET



No. 1790.

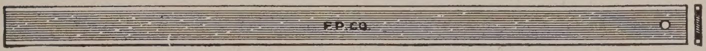
No. 1790.	Blackboard Set, with knobs, consisting of T Square, 24 inches; straight edge, 36 inches; protractor, 15½ inches; Triangle, 24 inches ....Per set,		
1791.	T Square of above set................	Each,	Dozen,
1792.	Straight edge of above set.............	"	"
1793.	Triangle of above set..................	"	"
1794.	Protractor of above set...............	"	"

STRAIGHT EDGES



No. 1800. Maple, square edges.

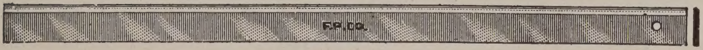
Size in inches	18	24	30	36	42
Each					



No. 1804. Transparent lined Straight Edges, have square edges, up to 42″ made 125/1000 thick and from 48″ to 72″ made 175/1000 thick.

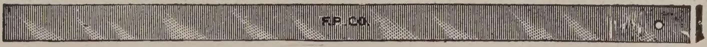
Size in inches	18	24	30	36	42	48	54	60	72
Each									

See Page 173 for Parallel Rule Straight Edges.



No. 1807. Steel Straight Edges, nickel-plated, one edge beveled.

Size in inches	15	18	24	30	36	42	48	54	60	72
Width, inches	1⅜	1⅜	1½	1¾	1¾	2	2	2	2	2½
Thick, inches	$\frac{5}{64}$	$\frac{5}{64}$	$\frac{5}{64}$	$\frac{5}{64}$	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{7}{64}$
Each										



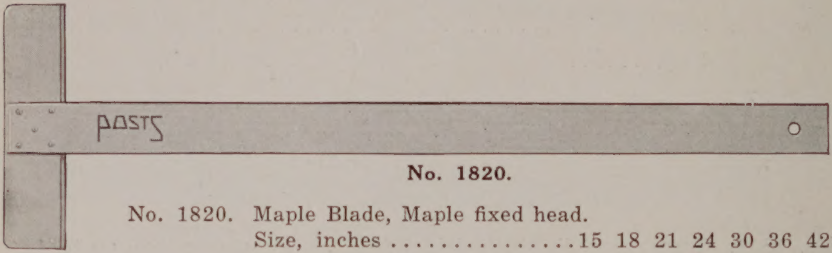
No. 1808. Steel Straight Edges, nickel-plated, square edges.

Size in inches	15	18	24	30	36	42	48	54	60	72
Width, inches	1⅜	1⅜	1½	1½	1¾	1¾	2	2	2	2½
Thick, inches	$\frac{5}{64}$	$\frac{5}{64}$	$\frac{5}{64}$	$\frac{5}{64}$	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{3}{32}$	$\frac{7}{64}$
Each										

See Page 173 for Parallel Rule Attachment Straight Edges

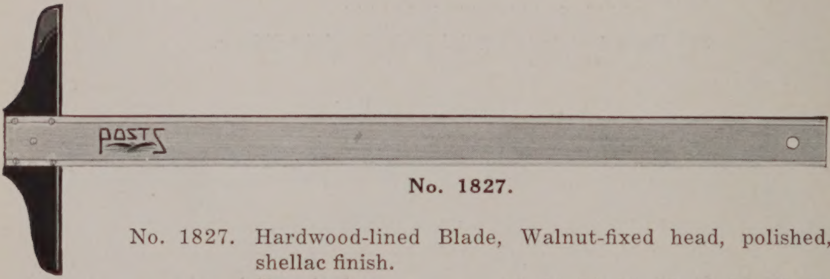
WOODEN T SQUARES

Manufactured in our own factory of carefully selected and thoroughly seasoned material. Each T Square is stamped with our Trade Mark, which guarantees quality and absolute dependability.



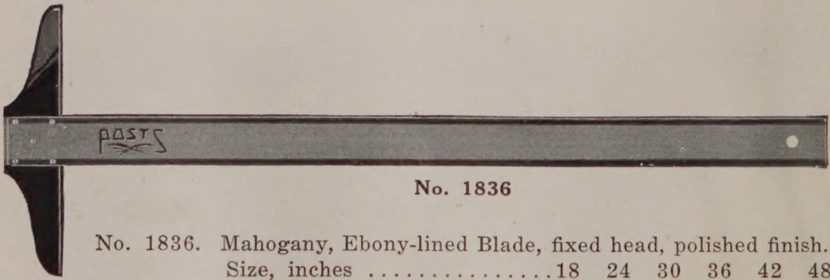
No. 1820.

No. 1820. Maple Blade, Maple fixed head.
Size, inches 15 18 21 24 30 36 42
Each ....



No. 1827.

No. 1827. Hardwood-lined Blade, Walnut-fixed head, polished, shellac finish.
Size, inches 18 24 30 36 42 48 54 60 72
Each ....



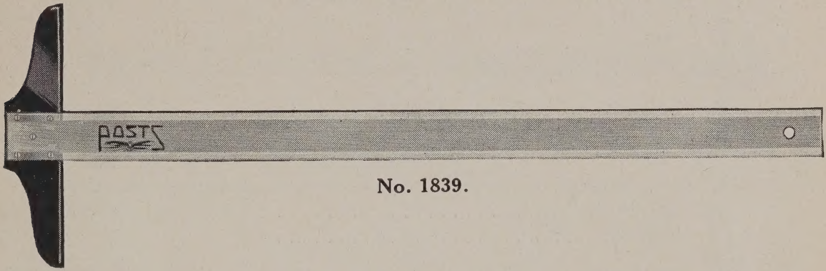
No. 1836

No. 1836. Mahogany, Ebony-lined Blade, fixed head, polished finish.
Size, inches 18 24 30 36 42 48
Each ....

VERDOID AND AMBER-LINED T SQUARES

The transparent edges give greater definition and are an invaluable drafting aid. The blade is of seasoned Maple, and fixed head of Black Walnut, highly finished.

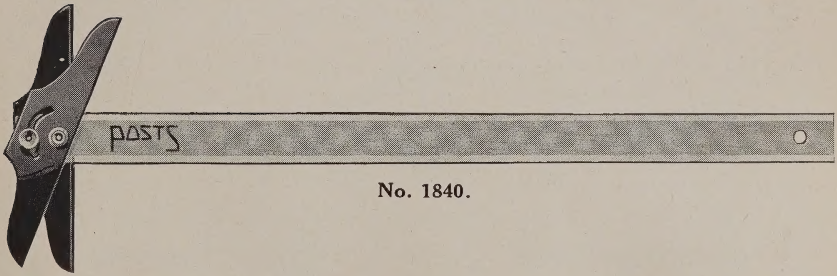
As with all POST T SQUARES similarly constructed, the edges are not simply glued on blade, but are mortised in and set with special cement. These are in turn reinforced by a transverse strip of the same, which is mortised into both wood and verdoid or celluloid at the free end of blade. The screws which hold blade to head are in the blade proper. Maximum strength is assured in all POST T SQUARES without any danger of splitting or warping.



No. 1839.

No. 1839. Transparent-lined, Maple Blade, Ebonized fixed head, lacquered and hand-rubbed, up to 42 inches in length 125/1000 thick, and from 48″ to 72″ 175/1000 thick.

Size, inches	15	18	24	30	36	42	48	54	60	72
Each										



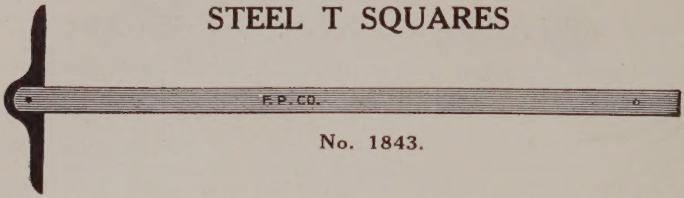
No. 1840.

No. 1840. Transparent-lined, Maple Blade, Ebonized shifting double head, with two nickel-plated swivels, lacquered and hand-rubbed, up to 42 inches in length 125/1000 thick and from 48″ to 72″ 175/1000 thick.

Size, inches	18	24	30	36	42	48	54	60	72
Each									

VERDOID is a hard, transparent, green composition. It casts no shadow, rests the eyes. It brings out the lines with great distinctness and is excellent for use under artificial light.

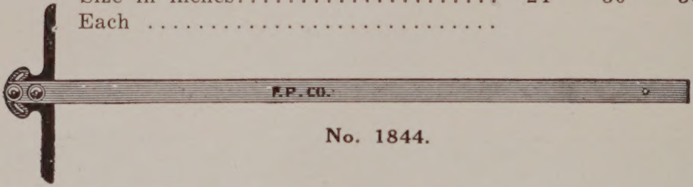
STEEL T SQUARES



No. 1843.

No. 1843. Steel Blade, heavy nickel-plated, fixed japanned iron head.

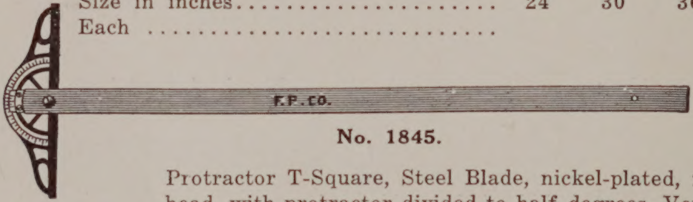
Size in inches	24	30	36	42
Each				



No. 1844.

No. 1844. Steel Blade, heavy nickel-plated, movable japanned iron head.

Size in inches	24	30	36	42
Each				



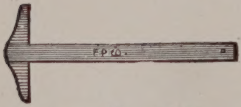
No. 1845.

Protractor T-Square, Steel Blade, nickel-plated, movable head, with protractor divided to half degrees, Vernier on end of blade reading to minutes.

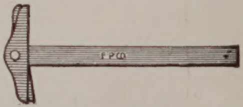
No. 1845.

Size in inches	24	30	36	42
Width in inches	1¼	1½	1½	1¾
Each				

ENGRAVERS' T SQUARES



No. 1846.



No. 1847.

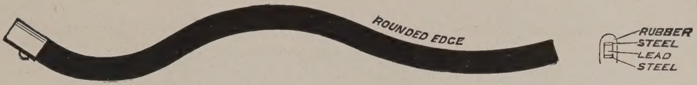
No. 1846. Engravers' T Square, Steel Blade, fixed head.

Size in inches	6	8	10	12
Each				

1847. Engravers' T Square, Steel Blade, movable head, with swivel.

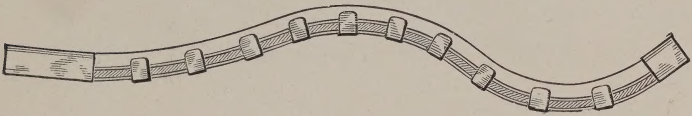
Size in inches	6	8	10	12
Each				

ADJUSTABLE CURVE RULERS


ROUNDED EDGE
RUBBER
STEEL
LEAD
STEEL

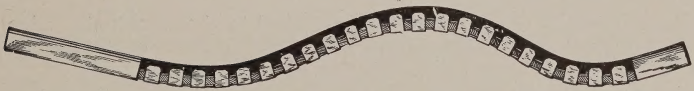
Nos. 1860-1861.

No. 1860. Adjustable Curve Ruler, Double Edge, 7 inches long. . Each,
1861. " " " " " 15 " " . .
1862. " " " " " 31 " " . .



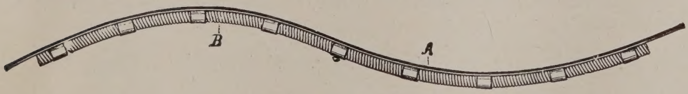
No. 1863.

No. 1863. Adjustable Curve Ruler, 12 inches long . . . . Each,
1864. " " " 24 " " . . . .



No. 1865.

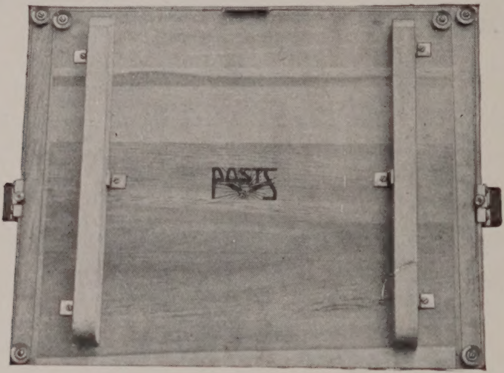
No. 1865. Adjustable Curve Ruler, 14½ inches long. . . . . Each,



No. 1866.

No. 1866. Adjustable Curve Ruler, 30 inches long. . . . . Each,

POST'S PRIMO PARALLEL RULE ATTACHMENT



View of the under side of drawing board showing simple method of fastening our PRIMO PARALLEL RULE ATTACHMENT

One of the desirable features of the **PRIMO** is that the entire equipment is underneath the board thus preventing interference with the use of any other instrument or the draftsman's clothes.

Post's **PRIMO** with our special straight edge makes the need of watching the head of the "T" square unnecessary.

Both ends of the straight edge are attached to the same outer edge of the guide cord with an adjustable clamp, thus assuring perfect parallel motion of the straight edge.

A steel tension spring keeps this guide cord always at a proper tension and the six evenly balanced wheels operate so freely that the straight edge responds to the slightest touch, yet does not permit it to slide of its own accord when board is inclined.

The straight edge can be raised to permit removal of drawings and a simple adjustment of the clamp screws permits setting of straight edge at any angle desired.

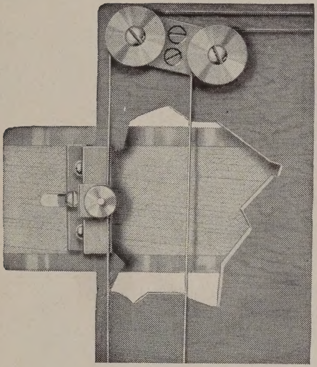
All parts, with the exception of the tension spring, are made of highly polished brass.

Made in two styles as listed below. Put up in a neat box with full directions.

ATTACHMENT ONLY WITHOUT STRAIGHT EDGE

No. 1850. **PRIMO** Ball Bearing Parallel Rule Attachment............Each,

Detail of **PRIMO** Parallel Rule Attachment, Showing Method of Fastening Adjustable Clamps

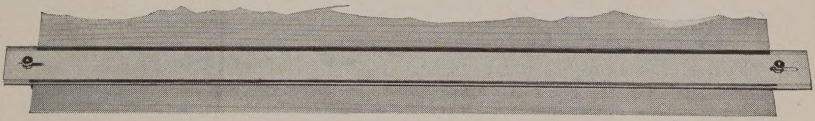


The illustration shows how a Post Straight Edge is attached to the moving cord of the No. 1850 Attachment and also shows how the guide wheels are placed on the upper corner of the underneath side of the Drawing Board.

Illustration shows the Straight Edge clamp which also acts as a guide, preventing the Straight Edge from getting out of position.

STRAIGHT EDGES

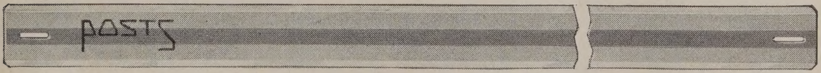
For Use with Parallel Rule Attachment



No. 1854.

Straight edges for use with **PRIMO** parallel rule attachment are approximately four inches longer than the drawing board or drawing table top. Straight edges are furnished with oblong slots cut in the proper position to allow the attachment to be properly adjusted.

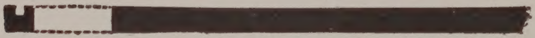
No. 1854. Transparent, celluloid-lined, Maple blade Straight Edges, 75/1000 thick with one edge beveled.
Size in inches................46 52 59 64 76 88 100



No. 1855. Extra heavy, Transparent, celluloid-lined Straight Edges, blade made up of three pieces carefully joined with reverse grain to prevent warping, 250/1000 thick with one edge beveled.
Size in inches................46 52 59 64 76 88 100

No. 1857. Pencil Ledge—For Straight Edges.
Size 46 52 59 64 76 88 100
Each ....

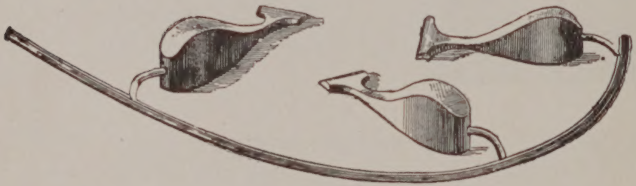
SPLINES



No. 1873.

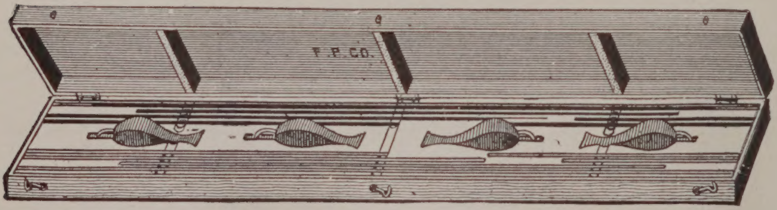
1873. Transparent Amber, inches 18 24 30 36 42 48

WEIGHTS FOR SPLINES



No. 1874.

No. 1874. Lead Weights for Splines, with hook, weight 3½ lbs.......Each,



No. 1875.

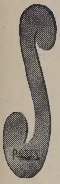
No. 1875. Set of Splines and Spline Weights, containing:

4 Spline Weights, No. 1874.

1 only Transparent Amber Spline, No. 1873—18, 24, 30, 36, 42 in.

In wooden box...Per set,

WOODEN AND TRANSPARENT CURVES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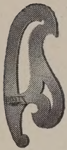
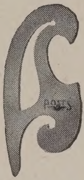
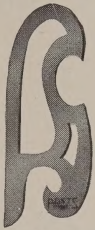
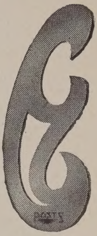
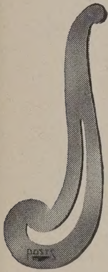

6


10


11


13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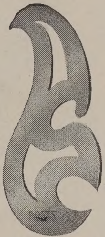
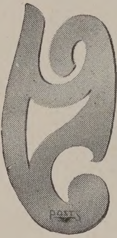

15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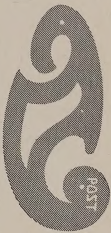
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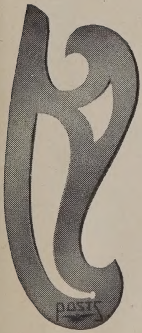
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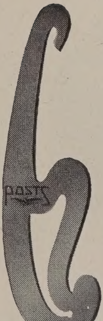
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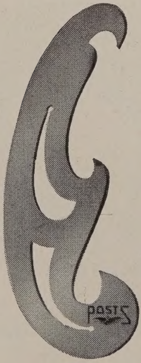
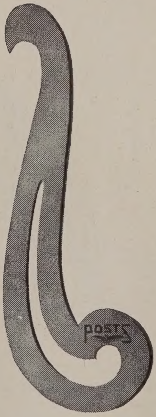
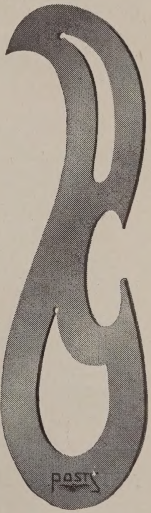
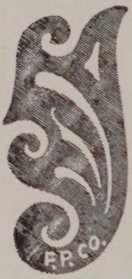

23


24

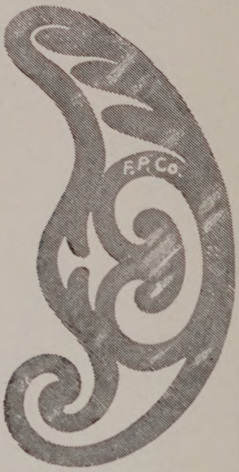

25

No. 1884. Transparent Amber..............................Each,
1885. Transparent Green ....

TRANSPARENT CURVES



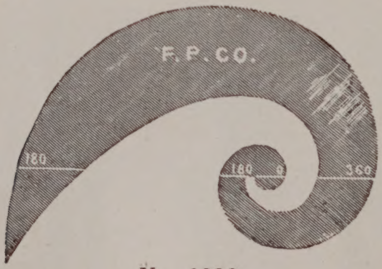
No. 1886.



No. 1888.

No. 1886. Combination Curve of Transparent Amber..........Each,

1888. Combination Curve of Transparent Amber..........

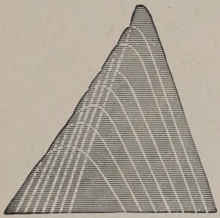


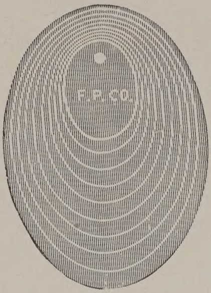
No. 1890.

No. 1890. Spiral Logarithmic Curve of Transparent Amber....Each,

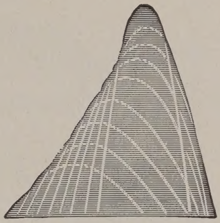
This curve contains every curve, limited only by its size, and can be used for intricate calculations.

HYPERBOLAS, ELLIPSES AND PARABOLAS


No. 1891.

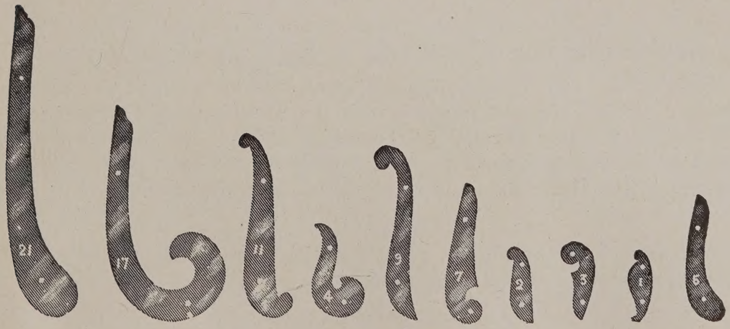


No. 1892.


No. 1894.

No.	Description	Set	Sizes	Transparent Amber
No. 1891.	Hyperbolas,	8 to set,	2 to 5½ inches........	Per set,
1892.	Ellipses	6 to set,	2 to 4½ inches........	
1893.	Ellipses,	10 to set,	1½ to 6 inches........	
1894.	Parabolas,	8 to set,	1¼ to 5½ inches........	
1895.	Parabolas,	8 to set,	3¼ to 14¼ inches........	

CURVES FOR MECHANICAL ENGINEERS



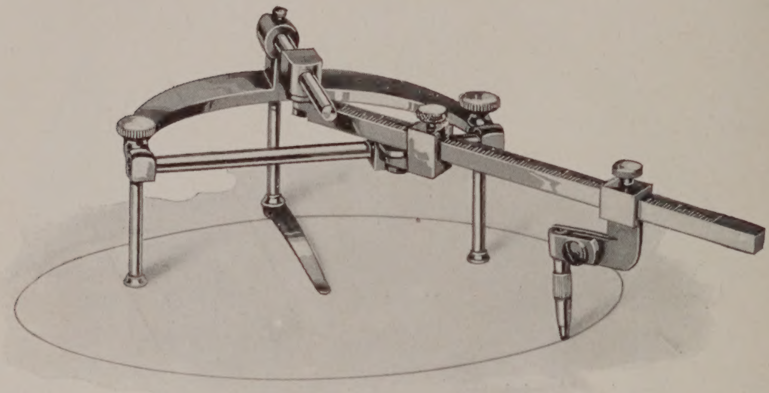
No. 1896.

No. 1896. Transparent Curves for mechanical and civil engineers.

Nos.	1	2	3	4	5	7	9	11	17	21
Each										

1896C. Set of 10 Curves in polished wooden box..........Per set,

EXCELSIOR ELLIPSOGRAPH



No. 1897.

A simple, smooth-working, fine-finished ellipsograph. Draws any ellipse between a circle 8 inches in diameter and an ellipse of 2½-inch major axis and ¼-inch minor axis, with a difference between major and minor axes of three inches or less.

DIRECTIONS FOR USING THE EXCELSIOR ELLIPSOGRAPH

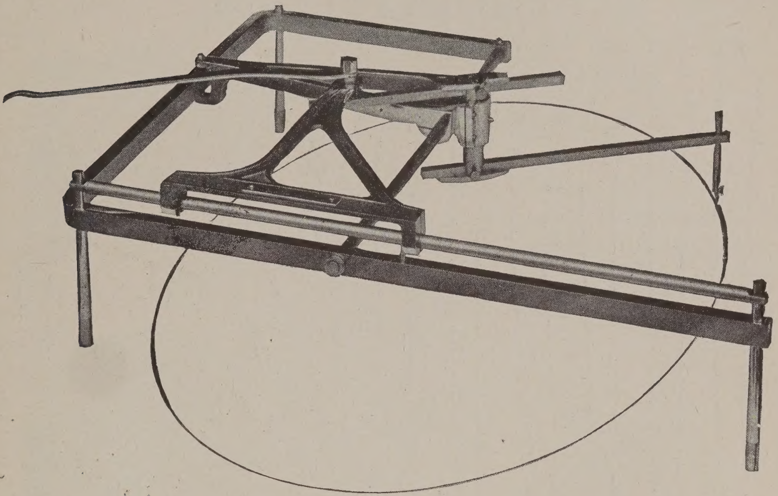
Mark off on any drawing the major and minor axes of the ellipse and its center. Place the ellipsograph with the needle point at the center and the two legs on a line parallel to the major axis. Set the pencil point at one end of the major axis and screw it tight to the arm. Turn the point to the end of the minor axis and tighten the remaining clamp.

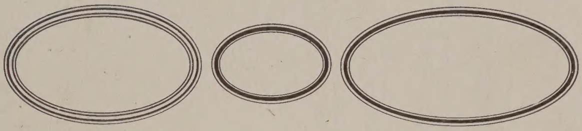
Now draw half the ellipse, reset the ellipsograph for the other side of the major axis and complete the ellipse.

The scale on the arm may be used to set the point at half the major axis. The second screw can be set to the difference between the semi-axes. The pencil point can be bent for fine adjustment to the end of the major axis.

No. 1897. Weight, 4½ oz. . . . . .Each,

THE PREMIER ELLIPSOGRAPH





THE PREMIER ELLIPSOGRAPH is extremely simple in construction, is easily adjusted to the size required, and will produce ellipses of any proportions up to 18x30 inches (provided the difference between the two dimensions does not exceed 12 inches), and draw a straight line, 12 inches long, through the major axis of the ellipse, and will locate the exact center. It will also draw circles of any diameter up to 20 inches.

The machine is constructed of high-grade steel, hard brass and cast iron, and is finished in heavily plated, highly polished nickel. The frame is 16¾x22¾ inches, and the machine stands 7⅜ inches high over all, and weighs 12½ pounds.

The work it produces is scientifically and mechanically accurate. There are no "corners" or inaccuracies to offend the eye. The minutest ellipse is as accurate as the larger ones. It will produce as many concentric lines as may be desired. It saves an enormous amount of time, as compared with all other methods of producing ellipses. It will do in from five to ten minutes that which would require hours of labor by old methods.

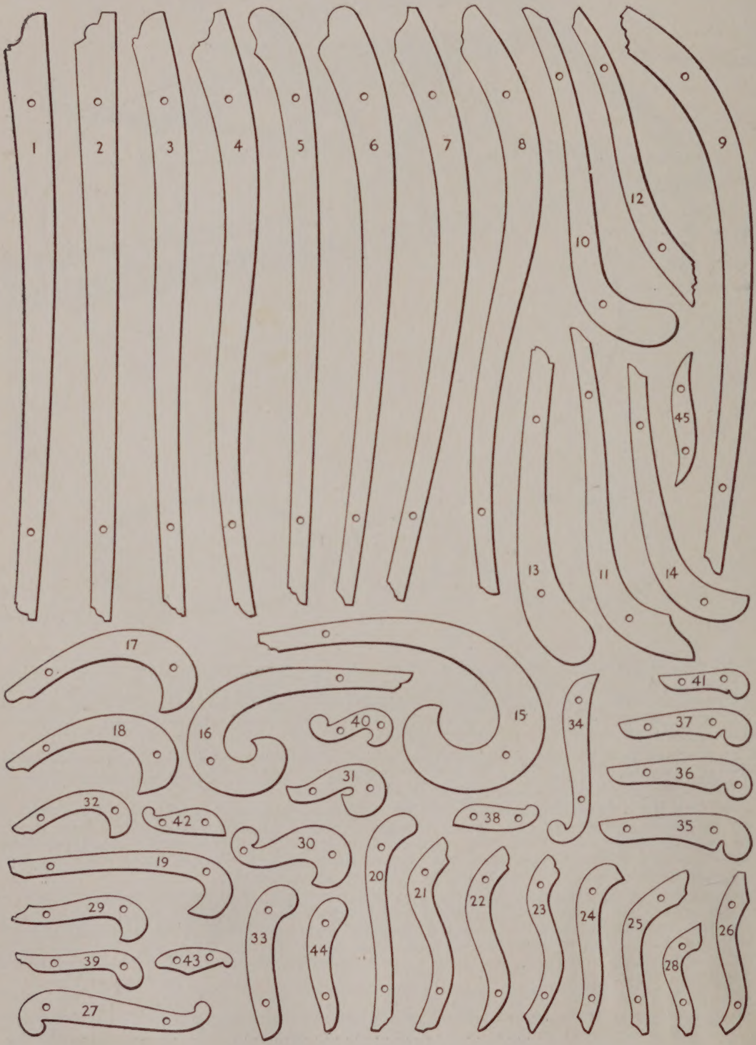
The adjustment for size is made on two arms, graduated to thirty-seconds of an inch. The upper arm is set at one-half the **difference** between the width and length; the lower arm at **one-half the width** of the ellipse desired. Parallel lines are obtained by simply changing the setting of the lower arm, the upper arm remaining as set for the first line. The simplicity of the device appeals to everyone. Not in the least complicated, it cannot get out of order and will last indefinitely.

No. 1898. Premier Ellipsograph—for drawing only with pen and pencil attachments and placing service..Each,

1898A. Premier Ellipsograph—for photo-engraving, plant with pen and pencil attachments, film-cutting attachment, holding device, leg sockets, placing device and one steel point for outlining copper prints.......................Each,

1898B. Premier Ellipsograph—for lithographic work with pen and pencil attachments, engraving attachment, tubular extension legs, stationary extension legs, non-slip rubbers and placing device.................................Each,

COPENHAGEN SHIP CURVES


1
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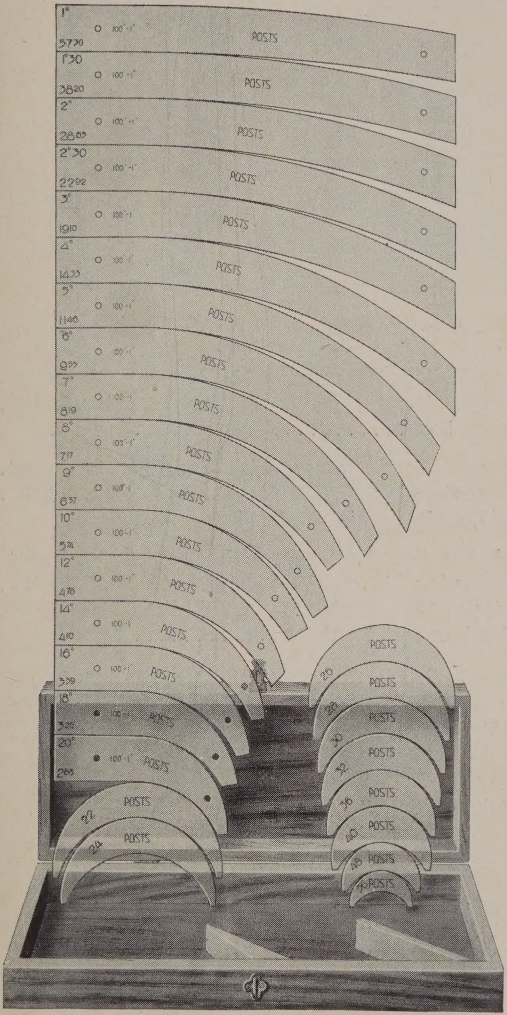
45

1902. **Transparent Amber, set of above 45 curves, in case.............**

Single Curves of Any of Above Patterns Made to Order.

CIRCULAR CELLULOID CURVES FOR HIGHWAY ENGINEERS

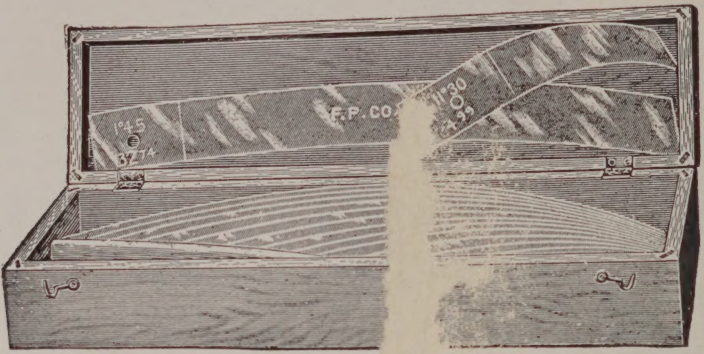

1°
5730
1°30
3820
2°
2865
2°30
2292
3°
1910
4°
1433
5°
1146
6°
955
7°
819
8°
717
9°
637
10°
574
12°
478
14°
410
16°
359
18°
20°
22
24
POSTS
100'-1"

Are indispensable for projecting on topography, for plotting and inking purposes.

This set consists of 27 curves with rounded edges for inking, each cut to scale, marked 1 inch = 100 feet, and designated by degrees, as shown on illustration, covering all practical requirements and needs in highway engineering.

No. 1905. Circular Celluloid Curves for highway engineers.
Set of 27 curves.......................................Per set,

TRANSPARENT AMBER RAILROAD CURVES



No. 22[illegible]

No. 2225. Transparent Amber Railroad [illegible]es, with Tangent, 10 in set, 12 to 120-inch radius, viz.: 1[illegible], 24, 36, 48, 60, 72, 84, 96, 108, 120 inches, in wooden box ....Per set,

2226. Transparent Amber Railroad Curves, with Tangent, 17 in set, 12 to 60-inch radius, viz.: 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60 inches, in wooden box......Per set,

2226½. Transparent Amber Railroad Curves, with Tangent, 30 in set, 1½ to 60-inch radius, viz.: 1½, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 35, 40, 45, 50, 60 inches, in wooden box with partition............Per set,

2227. Transparent Amber Railroad Curves, with Tangent, 41 in set, marked in degrees and inches to 100-ft. scale, viz.:

0° 30′=114.59 inches.
1° 00′= 57.30 "
1° 15′= 45.84 "
1° 30′= 38.20 "
1° 45′= 32.74 "
2° 00′= 28.65 "
2° 15′= 25.47 "
2° 30′= 22.92 "
2° 45′= 20.84 "
3° 00′= 19.10 "
3° 15′= 17.63 "
3° 30′= 16.37 "
3° 45′= 15.28 "
4° 00′= 14.33 "

4° 15′=13.48 inches.
4° 30′=12.73 "
4° 45′=12.07 "
5° 00′=11.46 "
5° 15′=10.92 "
5° 30′=10.42 "
5° 45′= 9.97 "
6° 00′= 9.55 "
6° 15′= 9.17 "
6° 30′= 8.82 "
6° 45′= 8.49 "
7° 00′= 8.19 "
7° 15′= 7.91 "
7° 30′= 7.64 "

7° 45′=7.40 inch.
8° 00′=7.17 "
8° 15′=6.95 "
8° 30′=6.75 "
8° 45′=6.55 "
9° 00′=6.37 "
9° 15′=6.20 "
9° 30′=6.04 "
9° 45′=5.88 "
10° 00′=5.74 "
10° 30′=5.4[illegible]
11° 00′=5.[illegible]

2227. In wooden box ....
2227A. In wooden box with partitions ......

TRANSPARENT AMBER RAILROAD CURVES

(Continued)

No. 2228. Transparent Amber Railroad Curves, with Tangent, 55 in set. marked in degrees and inches to 100-foot scale, viz.:

0° 15′=229.18 inches.
0° 30′=114.59 “
0° 45′= 76.39 “
1° 00′= 57.30 “
1° 15′= 45.84 “
1° 30′= 38.20 “
1° 45′= 32.74 “
2° 00′=28.65 “
2° 15′= 25.47 “
2° 30′= 22.92 “
2° 45′= 20.84 “
3° 00′= 19.10 “
3° 15′= 17.63 “
3° 30′= 16.37 “
3° 45′= 15.28 “
4° 00′= 14.33 “
4° 15′= 13.48 “
4° 30′= 12.73 “
4° 45′= 12.07 “
5° 00′=11.46 inches.
5° 15′=10.92 “
5° 30′=10.42 “
5° 45′= 9.97 “
6° 00′= 9.55 “
6° 15′= 9.17 “
6° 30′= 8.82 “
6° 45′= 8.49 “
7° 00′= 8.19 “
7° 15′= 7.91 “
7° 30′= 7.64 “
7° 45′= 7.40 “
8° 00′= 7.17 “
8° 15′= 6.95 “
8° 30′= 6.75 “
8° 45′= 6.55 “
9° 00′= 6.37 “
9° 15′= 6.20 “
9° 30′=6.04 inches.
9° 45′=5.88 “
10° 00′=5.74 “
10° 30′=5.48 “
11° 00′=5.22 “
11° 30′=4.99 “
12° 00′=4.78 “
12° 30′=4.59 “
13° 00′=4.42 “
13° 30′=4.25 “
14° 00′=4.10 “
14° 30′=3.96 “
15° 00′=3.83 “
16° 00′=3.59 “
17° 00′=3.38 “
18° 00′=3.20 “
19° 00′=3.03 “
20° 00′=2.88 “

2228. In wooden box ....Per set,

2228A. In wooden box with partition ....Per set,

2229. Single Railroad Curves of Transparent Amber........Each,

2230. Single Railroad Curves of Transparent Amber, with Tangent .... Each,

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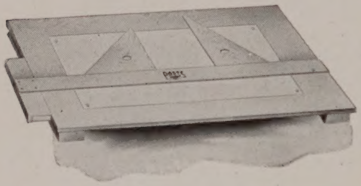
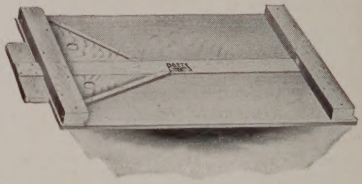
Railroad Curves of Any Desired Scale Cut to Order.

DRAWING KITS



Nos. 2245-7 Front



Nos. 2245-7 Back

Post Drawing Kits are compact and useful. They consist of drawing board, T Square and two wooden angles, 45° and 30°—60°. Each board is lightly, yet durably constructed, with cleats on the under side at each end to prevent warping. The T Square slides under the cleats and is held in place by the pressure of a spring in the end cleat. It, in turn, maintains the triangles in a securely interlocked position.

For beginners, or for temporary work, these Kits are not equaled for compact usefulness.

		Size
No. 2245.	Scholars' Drawing Kit No. 1	10 x 12 inches
2246.	Scholars' Drawing Kit No. 2	13 x 19 inches
2247.	Scholars' Drawing Kit No. 3	17 x 22 inches

SCHOOL DRAWING BOARDS

Three-ply Veneered School Drawing Boards. Made of 3-ply white basswood, guaranteed not to warp; 9/16-inch thick; two drawing surfaces.

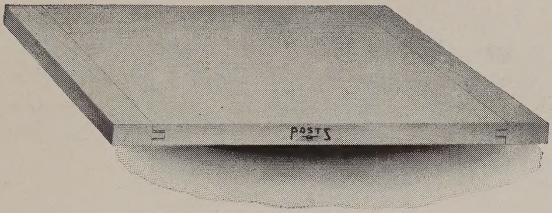
		Size
No. 2248A.	3-ply Veneered Boards	12 x 17 inches
2248B.	3-ply Veneered Boards	16 x 21 inches
2248C.	3-ply Veneered Boards	18 x 24 inches
2248D.	3-ply Veneered Boards	20 x 25 inches
2248E.	3-ply Veneered Boards	22 x 38 inches
2248F.	3-ply Veneered Boards	23 x 31 inches

SCHOOL DRAWING BOARDS

Same as above, but ⅜-inch thick; two drawing surfaces.

		Size
No. 2249A.	3-ply Veneered Boards	12 x 17 inches
2249B.	3-ply Veneered Boards	16 x 21 inches
2249C.	3-ply Veneered Boards	18 x 24 inches
2249D.	3-ply Veneered Boards	20 x 25 inches
2249E.	3-ply Veneered Boards	22 x 28 inches
2249F.	3-ply Veneered Boards	23 x 31 inches

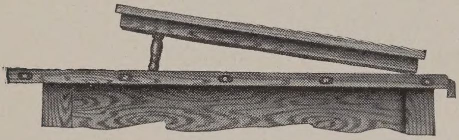
DRAWING BOARDS



Nos. 2252-2253

No. 2252. Pine wood, shellacked, 13/16-in. thick, with two drawing surfaces and end cleats. Size, in.: 12x17, 16x21, 18x24, 20x24½, 20x26, 23x31, 24x36, 31x42.

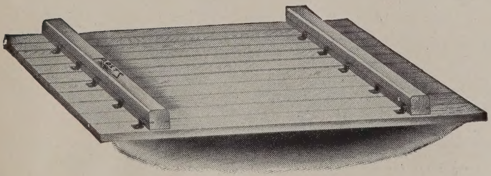
2253. Basswood, shellacked, 13/16-in. thick, with two drawing surfaces and end cleats. Size, in.: 12x17, 16x21, 18x24, 20x24½, 20x26, 23x31, 24x36, 31x42.



No. 2254A

No. 2254. Pine wood, 13/16-in. thick, with hardwood cleats dovetailed to allow contraction and expansion.
Size, inches 24x36, 23x31, 31x42

2254A. Inclined Board for use in connection with Engineering Type Tables.
Size, inches 24x36, 31x42

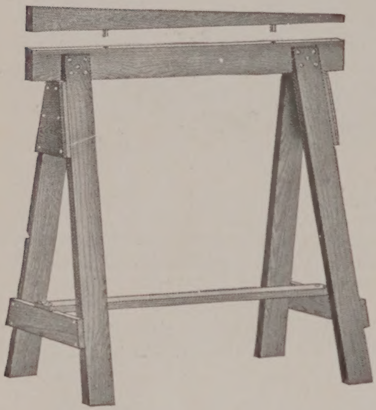


No. 2256

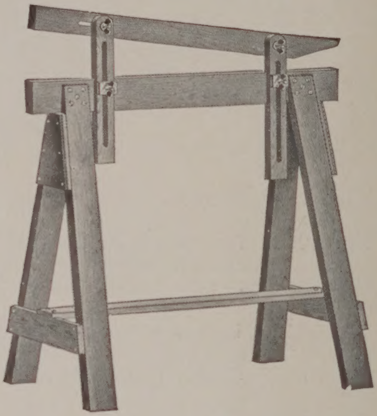
No. 2256A.	Size 23x31 in.
2256B.	Size 31x42 in.
2256C.	Size 36x48 in.
2256D.	Size 36x54 in.
2256E.	Size 36x60 in.
2256F.	Size 36x72 in.
2256G.	Size 42x60 in.
2256H.	Size 42x72 in.
2256J.	Size 42x84 in.
2256K.	Size 48x72 in.
2256L.	Size 48x84 in.
2256M.	Size 48x96 in.

No. 2256. Drawing Board, Pine wood, lined with hardwood, with adjustable metal clamps to allow for expansion and contraction of Board.

WOODEN HORSES FOR DRAWING BOARDS



Nos. 2258 and 2259



No. 2260

Dimensions: The plain horse No. 2258 is 38 inches long and 37 inches high; No. 2259 with sloping top is 37⅞ inches high at the front and 39½ inches high at the back.

No. 2260 with adjustable top has a minimum height of 39 inches when level and maximum height of 50 inches. When used on a slant, it has a minimum height of 37 inches at the front and 52 inches at the back. When it is desired to use the adjustable horse at a horizontal height of 37 inches, the adjustable device is simply removed.

Material and Finish: Made of hardwood, finished natural.

Shipping Weight: No. 2258, 32 lbs.; No. 2259, 35 lbs.; No. 2260, 40 lbs.

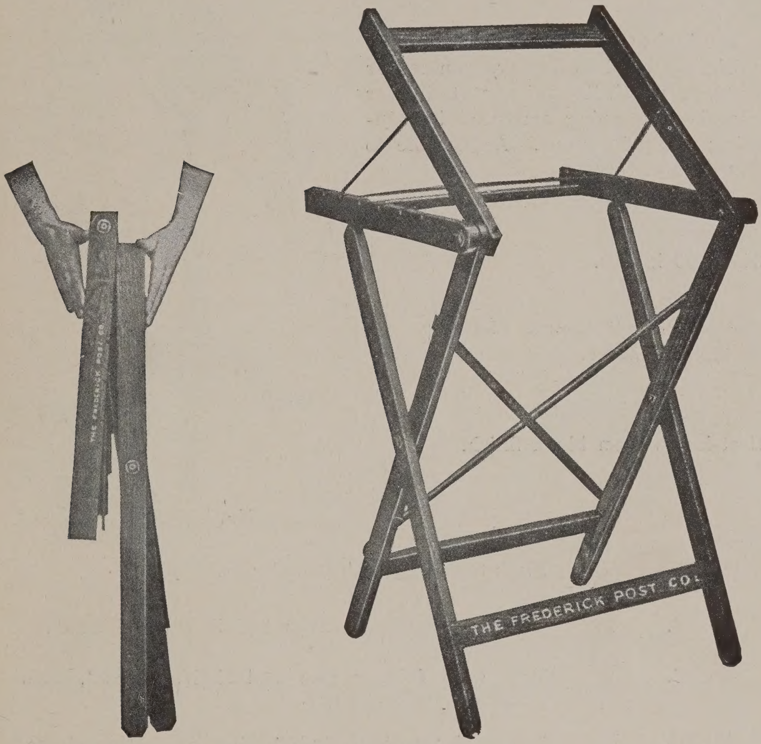
Shipped: Knocked down, one pair in carton.

No. 2258. Plain Horses ....Per Pair,

No. 2259. Plain Horses ....

No. 2260. Adjustable Horses ....

ADJUSTO DRAWING STAND



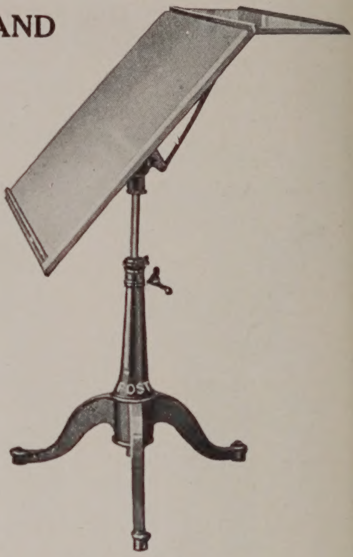
No. 2264

The **ADJUSTO** is a very handy Drawing Stand and is a marvel of compact usefulness. It is ideal for drafting room, studio, office, home, classroom —wherever the need for an efficient drawing stand is felt and where space limitations forbid heavier type drafting furniture.

When not in use, the **ADJUSTO** occupies a space of only 6½x40 inches. It can be opened instantly to position shown. The height is adjustable from 30 to 37 inches, and the easel rest at top is likewise adjustable to six different angles. The easel rest is provided with adjustable rests for drawing board. Stands firmly and cannot get out of order.

No. 2264. **ADJUSTO** Drawing Stand. Well-seasoned, selected hardwood. .... Each,

ILLUSTRATOR DRAWING STAND



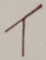
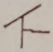
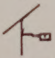
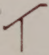
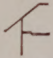
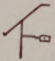
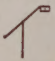
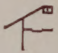
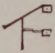
No. 2265D

Top:
23x26 inches. Oak, varnished golden finish, attached to strong, iron-center shaft, on which it can be rotated after releasing clamping screw and tightening screw in collar. Adjustable to any desired angle.

Adjustable Height:
31 to 39 inches.

Supporting Steel Center Shaft:
¾-inch diameter.

Tripod Base:
Cast-iron Japan black finish.

No. 2265A.		Plain top only, with pencil rest.
2265B.		Top, with folding arm and plain shelf, 7½x9″.
2265C.		Top, with folding arm and shelf, 7½x9″, with drawer 6x8x3″ deep.
2265D.		Top, with top shelf, 7x26″. See illustration above.
2265E.		Top, with top shelf, 7x26″, and folding arm with plain shelf, 7½x9″.
2265F.		Top, with top shelf, 7x26″, and folding arm with shelf, 7½x9″, and drawer, 6x8x3″ deep.
2265G.		Top, with top shelf, 7x26″, and two drawers under same, each 10x4⅜x2″ deep.
2265H.		Top, with top shelf, 7x26″, and two drawers under same, each 10x4⅜x2″ deep, and folding arm with plain shelf, 7½x9″.
2265J.		Top, with top shelf, 7x26″, and two drawers under same, each 10x4⅜x2″ deep, and folding arm with shelf, 7½x9″, and drawer, 6x8x3″ deep.
K.		Extension handle for clamping top.
L.		Foot Rest. See illustration 2318D-L.
M.		Casters, per set,
N.		Locks for small drawers in top shelf, each,

VICTOR DRAWING STAND

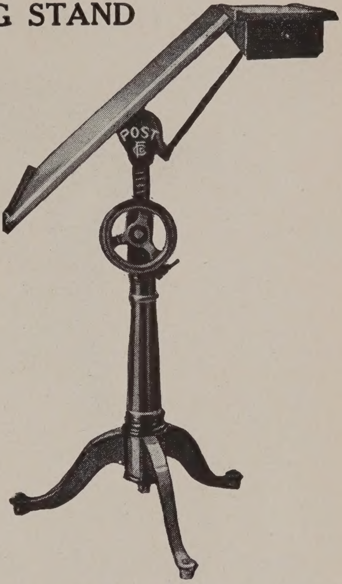
This stand is entirely different from any placed on the market heretofore. The simple turning of wheel to right or left raises or lowers, eliminating the necessity for any additional screws or clamp devices. All gears enclosed.

Top:
23x26 inches. Golden oak finish and attached to steel center shaft on which it can be rotated. Adjustable to any angle.

Adjustable Height:
33 to 43½″.

Supporting Center Shaft:
1⅜ inches diameter.

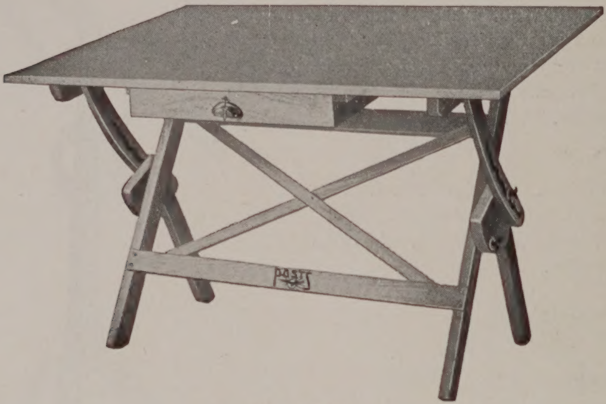
Tripod Base:
Cast iron, attractively finished, dark olive green with gold striping.



No. 2266G

No. 2266A.	Plain top only, with pencil rest.
2266B.	Top, with swinging arm and plain shelf, 7½x9″.
2266C.	Top, with swinging arm and shelf, 7½x9″, with drawer, 6x8x3″ deep.
2266D.	Top, with top shelf, 7x26″. See illustration above.
2266E.	Top, with top shelf, 7x26″, and swinging arm with plain shelf, 7½x9″.
2266F.	Top, with top shelf, 7x26″, and swinging arm with shelf, 7½x9″, and drawer, 6x8x3″ deep.
2266G.	Top, with top shelf, 7x26″, and two drawers under same, each 10x4⅜x2″ deep.
2266H.	Top, with top shelf, 7x26″, and two drawers under same, each 10x4⅜x2″, and swinging arm with plain shelf, 7½x9″.
2266J.	Top, with top shelf, 7x26″, and two drawers under same, each 10x4⅜x2″, and swinging arm with shelf 7½x9″, and drawer, 6x8x3″ deep.
K.	Extension handle for clamping top.
L.	Foot Rest, as shown in Illustration 2318D-L.
M.	Casters, per set.
N.	Locks for small drawers in top shelf, each.

JEFFERSON DRAWING TABLE



No. 2268

The construction of the **JEFFERSON** Adjustable Drawing Table is very simple and yet exceedingly substantial.

The top can be tilted and clamped firmly at any angle. The height of the table is adjustable from 38 to 48 inches, by means of spreading or closing the legs. A bolt with a wing-thumb nut, inserted in the cam-shaped piece of the rear legs, firmly holds the adjustment.

The stand is made of well-seasoned oak and the top of selected white pine.

JEFFERSON ADJUSTABLE DRAWING TABLES

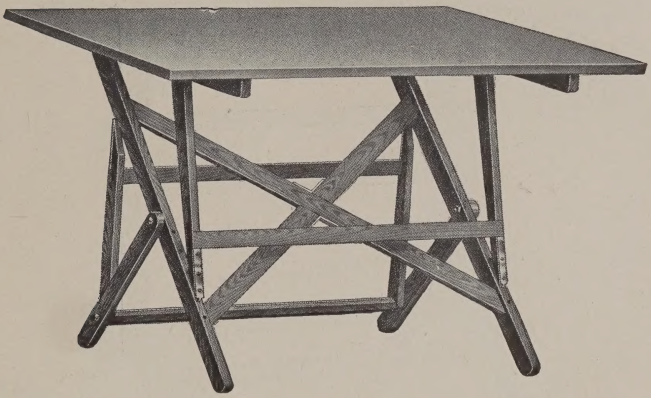
No. 2268C.	With drawing board top, size 36x48 inches	Each,
2268D.	With drawing board top, size 36x54 inches	Each,
2268E.	With drawing board top, size 36x60 inches	Each,
2268F.	With drawing board top, size 36x72 inches	Each,
2268G.	With drawing board top, size 42x60 inches	Each,
2268K.	With drawing board top, size 48x72 inches	Each,

All Jefferson Drawing Tables are equipped with drawer; lock extra.

JEFFERSON ADJUSTABLE STANDS WITHOUT TOP

No. 2269.	**Small** Stand only for boards 36x54 in. and smaller	Each,
2270.	**Large** Stand only for boards 36x60 in. and larger	Each,

LAKESIDE DRAWING TABLE



No. 2272

THE LAKESIDE is of a very simple but durable construction, made entirely of wood. The table is very light and as it folds up flat, it is easy to carry and, therefore, especially adapted for field or camp use.

The top is made of selected, kiln-dried white pine, the trestle of well-seasoned, shellac-finished hardwood.

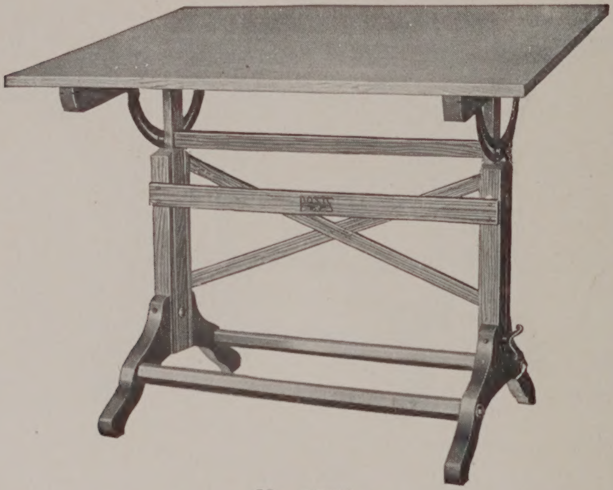
LAKESIDE DRAWING TABLES

No. 2272B.	With drawing board top, 31x42 inches	Each,
2272C.	With drawing board top, 36x48 inches	Each,
2272D.	With drawing board top, 36x54 inches	Each,
2272E.	With drawing board top, 36x60 inches	Each,
2272F.	With drawing board top, 36x72 inches	Each,
2272G.	With drawing board top, 42x60 inches	Each,
2272K.	With drawing board top, 48x72 inches	Each,

LAKESIDE DRAWING STANDS ONLY

No. 2273.	**Small** Stands only for boards 36x54 in. and smaller	Each,
2274.	**Large** Stands only for boards 36x60 in. and larger	Each,

NORWOOD DRAWING TABLE



No. 2275

The popularity of this style of Drawing Table is shown by the number o imitating types which have been placed on the market, but which lack th sturdy qualities of the POST **NORWOOD** original. The top is easily raise and maintained at any height by clamps at the sides; the angle desired i secured by releasing clamp screws and moving the curved arches until th required position is had.

The top is made of thoroughly dried, selected pine wood and the stand o well-seasoned oak, shellac-finished.

It is a very firm table. Iron-strip reinforcements span the supportin brackets underneath, making it additionally secure.

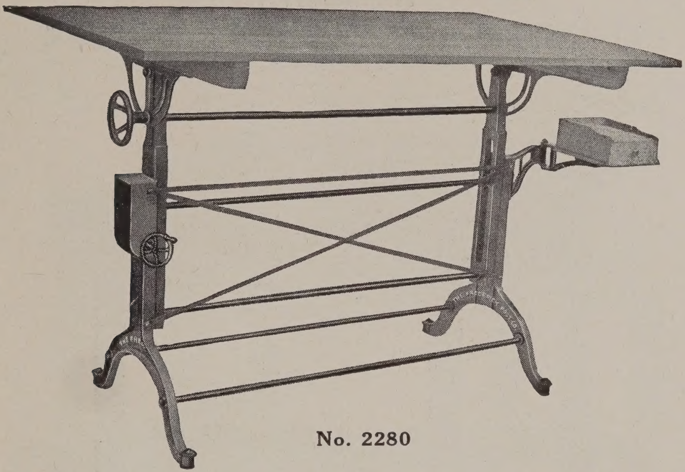
NORWOOD DRAWING TABLES

No. 2275A.	With drawing board top, 23x31 inches..........	Each,
2275B.	With drawing board top, 31x42 inches..........	Each,
2275C.	With drawing board top, 36x48 inches..........	Each,
2275D.	With drawing board top, 36x54 inches..........	Each,
2275E.	With drawing board top, 36x60 inches..........	Each,
2275F.	With drawing board top, 36x72 inches..........	Each,
2275G.	With drawing board top, 42x60 inches..........	Each,
2275K.	With drawing board top, 48x72 inches..........	Each,

NORWOOD DRAWING STAND ONLY

No. 2276.	**Small** Stands only for boards 36x54 in. and smaller..	Each,
2277.	**Large** Stands only for boards 36x60 in. and larger..	Each,

PRIMO DRAWING TABLE



No. 2280

The **PRIMO** Steel Frame Drawing Table is one of our best sellers, and with good reason. The simple, yet sturdy base, iron throughout, makes a very firm rest, regardless of the position of the top. The raising and lowering gears are enclosed in a box at the side and any desired height can be had simply by turning the hand wheel. The height is maintained without the necessity for additional clamping.

The top is tipped and held at any desired angle by releasing and tightening the simple wheel adjustment shown in the illustration.

We recommend this table to firms having large drafting departments, where the economical utilization of floor space is desirable.

Drawing Board Top: Selected, well-seasoned white pine.
A clamp screw at side holds table top at any desired angle.
Adjustable Height: 28 to 49 inches.
Frame: Iron, finished in olive green.

PRIMO DRAWING TABLES

No. 2280B.	With drawing top, 31x42 inches	Each,
2280C.	With drawing top, 36x48 inches	Each,
2280D.	With drawing top, 36x54 inches	Each,
2280E.	With drawing top, 36x60 inches	Each,
2280F.	With drawing top, 36x72 inches	Each,
2280G.	With drawing top, 42x60 inches	Each,
2280H.	With drawing top, 42x72 inches	Each,
2280K.	With drawing top, 48x72 inches	Each,
2280L.	With drawing top, 48x84 inches	Each,

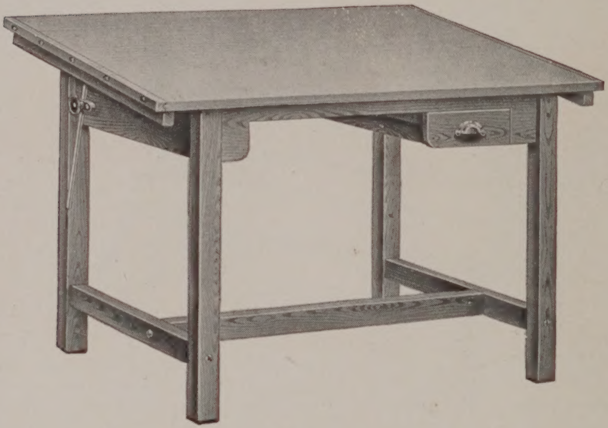
PRIMO DRAWING STANDS ONLY

No. 2281.	**Small** Stands, for boards 36x55 in. and smaller	Each,
2282.	**Large** Stands, for boards 36x60 in. and larger	Each,

ACCESSORIES

Swinging Shelf, 7½x9 inches.
Swinging Shelf, 7½x9 inches, with drawer 6x8x3 inches deep.
Set of Casters.

RIDGWAY
ENGINEERING TYPE DRAWING TABLE



No. 2290 Ridgway

Drawing Board Top: Selected Basswood with hardwood end cleats.
Finish: Light golden Oak.
Frames: Oak.
Height: 34 inches.

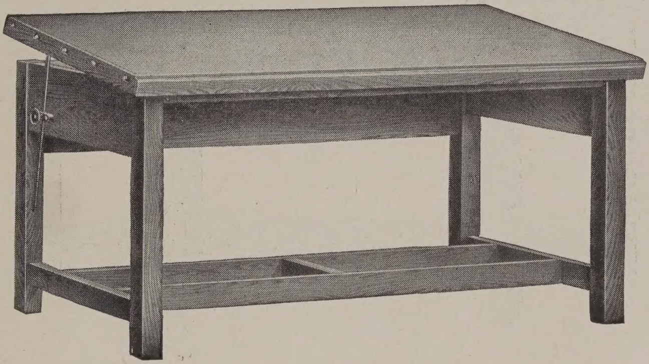
Equipment: Tables Nos. 2290C and 2290D have a blue print compartment 1¼x28½x40½ inches inside and a tool drawer 3½x7⅞x25 inches inside. Tables Nos. 2290E and 2290F have a compartment 1¼x28½x52⅞ inches inside and a tool drawer 3½x13x26 inches inside.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Top Size	Shipping Weight
2290C	166	36x48x1$\frac{1}{16}$ inches	135 lbs.
2290D	167	36x54x1$\frac{1}{16}$ inches	140 lbs.
2290E	168	36x60x1$\frac{1}{16}$ inches	165 lbs.
2290F	169	36x72x1$\frac{1}{16}$ inches	180 lbs.

These Tables can be raised 3 inches with raising blocks which are furnished.

SPRINGFIELD
ENGINEERING TYPE DRAWING TABLE



No. 2292 Springfield

Drawing Board Top: Selected White Pine with hardwood end cleats.

Finish: Light golden Oak.

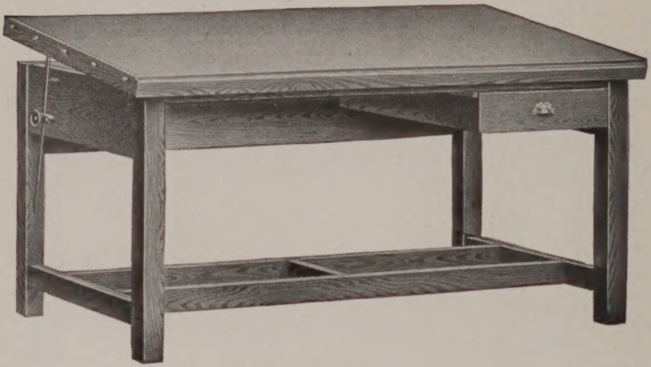
Frames: Oak.

Height: 34 inches.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2292E	250A	Adjustable	36x60 inches	155 lbs.
2292F	220	Adjustable	36x72 inches	165 lbs.
2292J	230	Adjustable	42x84 inches	225 lbs.
2293E	255A	Solid	36x60 inches	155 lbs.
2293F	225	Solid	36x72 inches	165 lbs.
2293J	240	Solid	42x84 inches	225 lbs.

LAWNDALE
ENGINEERING TYPE DRAWING TABLE



No. 2294 Lawndale

Drawing Board Top: Selected White Pine with hardwood end cleats.

Finish: Light golden Oak.

Frames: Oak.

Height: 34 inches.

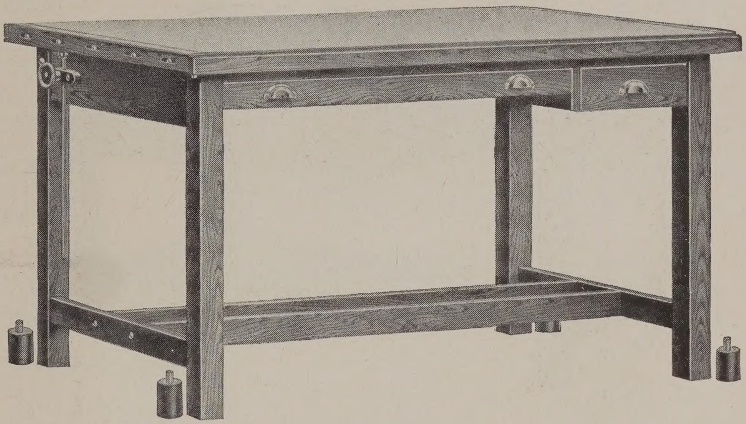
Equipment: Drawers, E size 3¾x10½x27¼ inches, F size 3¾x17⅝x24 inches and J size 3¾x20⅛x32 inches, inside measurements.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2294E	251	Adjustable	36x60 inches	165 lbs.
2294F	221	Adjustable	36x72 inches	180 lbs.
2294J	230A	Adjustable	42x84 inches	250 lbs.
2295E	256	Solid	36x60 inches	165 lbs.
2295F	226	Solid	36x72 inches	180 lbs.
2295J	240A	Solid	42x84 inches	250 lbs.

ADDISON

ENGINEERING TYPE DRAWING TABLE



No. 2296 Addison

Drawing Board Top: Selected White Pine with hardwood end cleats.

Finish: Light golden Oak.

Frames: Oak.

Height: 34 inches.

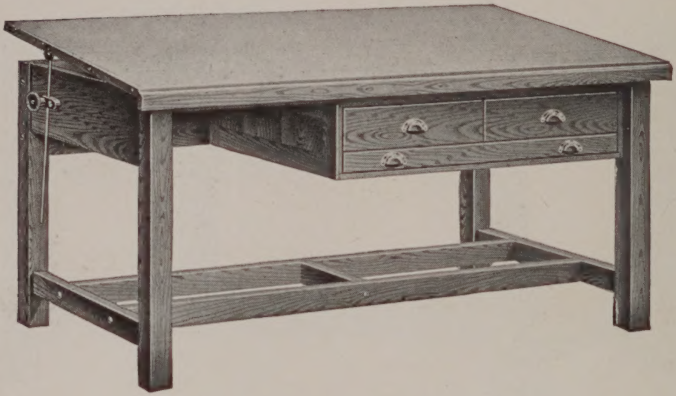
Equipment: Drawers, E size 3¾x10½x27¼ inches and 2x27¼x37⅛ inches, F size 3¾x17⅝x24 inches and 2x25x41⅞ inches, J size 3¾x20⅛x32 inches and 2x32x50⅝ inches, inside measurements.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2296E	250	Adjustable	36x60 inches	170 lbs.
2296F	221A	Adjustable	36x72 inches	195 lbs.
2296J	231	Adjustable	42x84 inches	265 lbs.
2297E	255	Solid	36x60 inches	170 lbs.
2297F	226A	Solid	36x72 inches	195 lbs.
2297J	241	Solid	42x84 inches	265 lbs.

HAMLIN

ENGINEERING TYPE DRAWING TABLE



No. 2298 Hamlin

Drawing Board Top: Selected White Pine with hardwood end cleats.

Finish: Light golden Oak.

Frames: Oak.

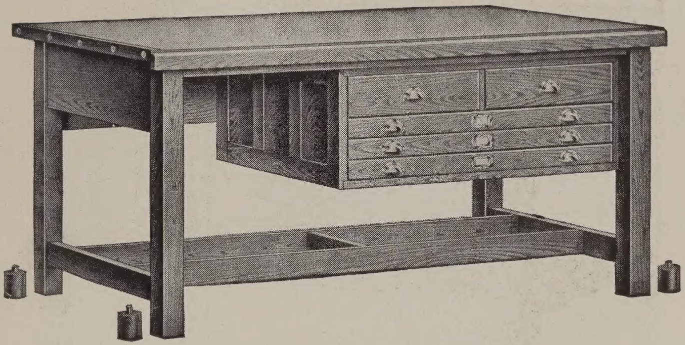
Height: 34 inches.

Equipment: Drawers, F size two 3¾x17⅝x25 inches and one 2x25x37⅝ inches, J size two 3¾x20x32 inches and one 2x32x42¼ inches, JS size two 3¾x17⅝x25 inches and one 2x25x37⅝ inches, inside measurements.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2298F	222	Adjustable	36x72 inches	245 lbs.
2298J	232	Adjustable	42x84 inches	305 lbs.
2298JS	235	Adjustable	42x84 inches	320 lbs.
2299F	227	Solid	36x72 inches	245 lbs.
2299J	242	Solid	42x84 inches	305 lbs.
2299JS	245	Solid	42x84 inches	320 lbs.

AVONDALE
ENGINEERING TYPE DRAWING TABLE



No. 2300 Avondale

Drawing Board Top: Selected White Pine with hardwood end cleats.

Finish: Light golden Oak.

Frames: Oak.

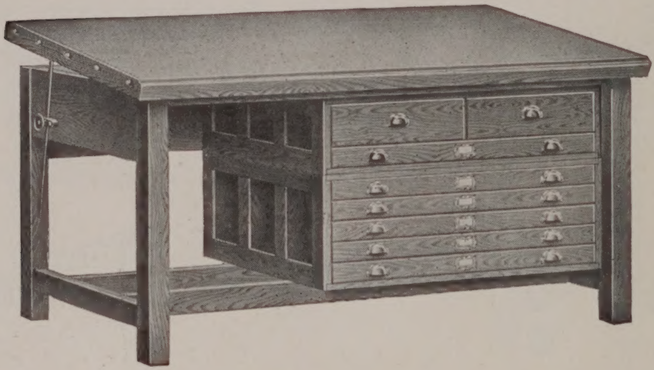
Height: 34 inches.

Equipment: Drawers, F size two 3¾x17⅝x25 inches and three 2x25x37⅝ inches, J size two 3¾x20x32 inches and three 2x32x42¼ inches, JS size two 3¾x17⅝x25 inches and three 2x25x37⅝ inches, inside measurements.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2300F	223	Adjustable	36x72 inches	310 lbs.
2300J	233	Adjustable	42x84 inches	370 lbs.
2300JS	236	Adjustable	42x84 inches	350 lbs.
2301F	228	Solid	36x72 inches	310 lbs.
2301J	243	Solid	42x84 inches	370 lbs.
2301JS	246	Solid	42x84 inches	350 lbs.

HARDING
ENGINEERING TYPE DRAWING TABLE



No. 2302 Harding

Drawing Board Top: Selected White Pine with hardwood end cleats.

Finish: Light golden Oak.

Frames: Oak.

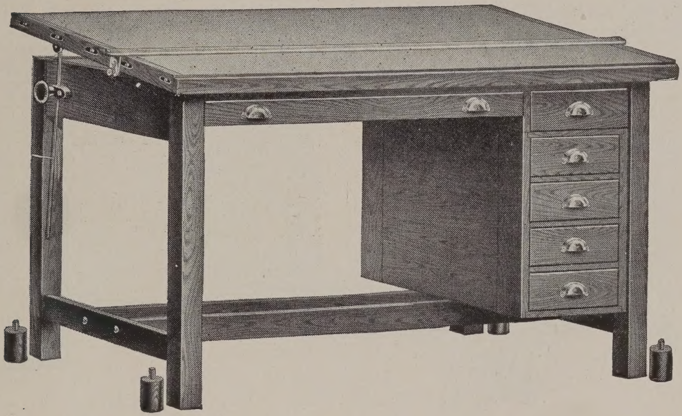
Height: 34 inches.

Equipment: Drawers, F size two 3¾x17⅝x25 inches and six 2x25x37⅝ inches, J size two 3¾x20x32 inches and six 2x32x42¼ inches, JS size two 3¾x17⅝x25 inches and six 2x25x37⅝ inches, inside measurements.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2302F	224	Adjustable	36x72 inches	360 lbs.
2302J	234	Adjustable	42x84 inches	425 lbs.
2302JS	237	Adjustable	42x84 inches	390 lbs.
2303F	229	Solid	36x72 inches	360 lbs.
2303J	244	Solid	42x84 inches	425 lbs.
2303JS	247	Solid	42x84 inches	390 lbs.

IRVING
ENGINEERING TYPE DRAWING TABLE



No. 2304 Irving

Drawing Board Top: Selected White Pine with hardwood end cleats.

Finish: Light golden Oak.

Frames: Oak.

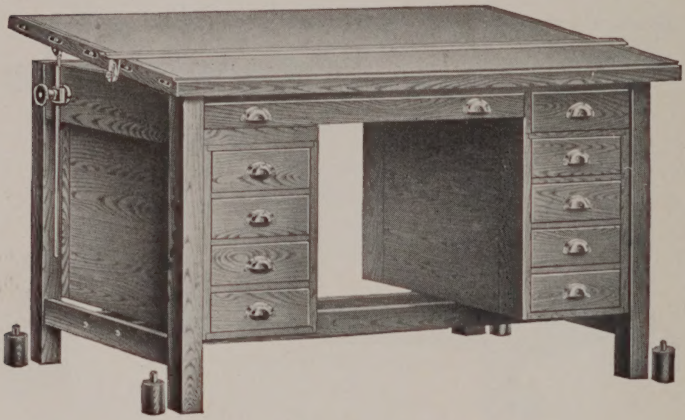
Height: 34 inches.

Equipment: Drawers, one 3¾x10½x27¼ inches, one 2x27¼x37⅛ inches, four 3$\frac{9}{16}$x10¼x23 inches, inside measurements.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2304E	252	Adjustable	36x60 inches	240 lbs.
2305E	257	Solid	36x60 inches	240 lbs.

BERTEAU
ENGINEERING TYPE DRAWING TABLE



No. 2306 Berteau

Drawing Board Top: Selected White Pine with hardwood end cleats.

Finish: Light golden Oak.

Frames: Oak.

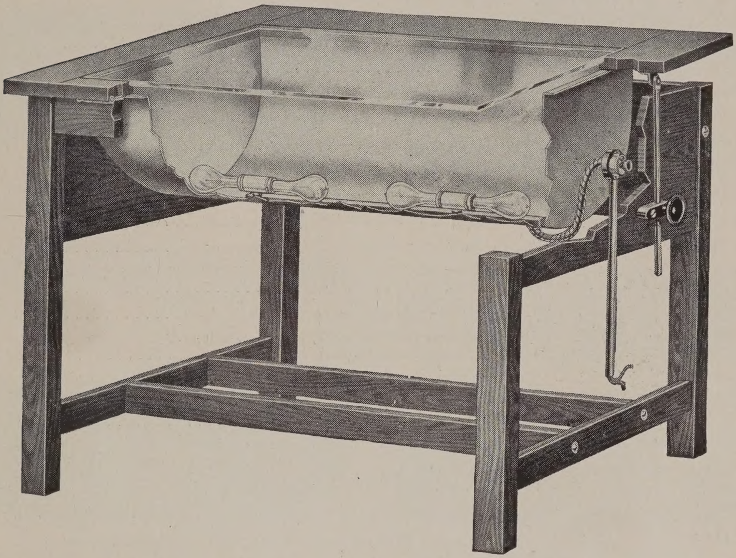
Height: 34 inches.

Equipment: Drawers, one 3¾x10½x27¼ inches, one 2x27¼x37⅛ inches, two 4-Drawer Units 3$\frac{9}{16}$x10¼x23 inches, inside measurements.

Shipped: Knocked down, instructions furnished for setting up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2306E	253	Adjustable	36x60 inches	285 lbs.
2307E	258	Solid	36x60 inches	285 lbs.

ILLUMINATED TRACING TABLE



No. 2308

Top: Selected Basswood with glass center 24x36 inches.

Finish: Light golden Oak.

Frames: Oak.

Height: 34 inches.

Equipment: Four electric light sockets with a snap switch at the end of the table which controls all lights. (Bulbs not furnished.)

Shipped: Set up.

Post No.	Hamilton No.	Style Top	Top Size	Shipping Weight
2308C	165	Adjustable	36x48 inches	220 lbs.

This Table can be raised 3 inches with raising blocks which are furnished.

OAK UNITS No. 2310 (Hamilton No. 32—3042 Line)

These Cabinets are for plans 30x42 inches and are 32x42¼ inches inside.

Post No.	Hamilton No.		Shipping Weight
2310A	32A	Five Drawer Section with Oak Top attached—Drawers 2 inches deep	180 lbs.
2310B	32B	Oak Cap	65 lbs.
2310C	32C	Five Drawer Section—Drawers 2 inches deep	145 lbs.
2310D	32D	Three Drawer Section—Drawers 3⅝ inches deep	130 lbs.
2310E	32E	One Drawer Section—Drawer 7⅛ inches deep	80 lbs.
2310F	32F	Base with Drawer—Drawer 5 inches deep	85 lbs.
2310G	32G	Plain Base—4 inches high	30 lbs.
2310H	32H	Low Sanitary Base—5¾ inches high	35 lbs.
2310J	32J	High Sanitary Base—22¾ inches high	60 lbs.
2310K	32K	Two Drawers 20x32x3⅞ inches with Tool Tray and one Drawer 32x42¼x2 inches	110 lbs.
2310L	32L	Three Drawers—Drawers 2 inches deep	100 lbs.
2310M	32M	Two Drawers 20x32x3⅞ inches with Tool Tray and three Drawers 32x42¼x2 inches	140 lbs.
2310P	32P	Six Drawer Card File Unit for 4x6 and 3x5-inch Cards	95 lbs.
2310R	32R	Two Drawer Vertical File Unit for Prints 21½x16 inches or smaller	140 lbs.

OAK UNITS No. 2311 (Hamilton No. 37—2436 Line)

These Cabinets are for plans 24x36 inches and are 25x37⅝ inches inside.

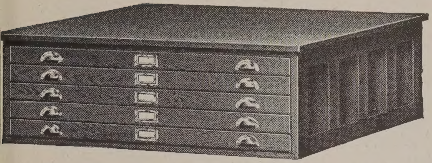
2311A	37A	Five Drawer Section with Oak Top attached—Drawers 2 inches deep	140 lbs.
2311B	37B	Oak Cap	50 lbs.
2311C	37C	Five Drawer Section—Drawers 2 inches deep	120 lbs.
2311D	37D	Three Drawer Section—Drawers 3⅝ inches deep	110 lbs.
2311E	37E	One Drawer Section—Drawer 7⅛ inches deep	65 lbs.
2311F	37F	Base with Drawer—Drawer 5 inches deep	68 lbs.
2311G	37G	Plain Base—4 inches high	28 lbs.
2311H	37H	Low Sanitary Base—5¾ inches high	30 lbs.
2311J	37J	High Sanitary Base—22¾ inches high	55 lbs.
2311K	37K	Two Drawers 17⅝x25x3⅞ inches with Tool Tray and one Drawer 37⅝x25x2 inches	85 lbs.
2311L	37L	Three Drawer Section—Drawers 2 inches deep	90 lbs.
2311M	37M	Two Drawers 17⅝x25x3⅞ inches with Tool Tray and three Drawers 37⅝x25x2 inches	105 lbs.
2311P	37P	Five Drawer Card File Unit for 4x6 and 3x5-inch Cards	85 lbs.

OAK UNITS No. 2312 (Hamilton No. 44—3648 Line)

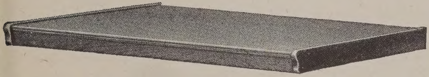
These Cabinets are for plans 36x48 inches and are 38x50 inches inside.

2312A	44A	Five Drawer Section with Oak Top attached—Drawers 2¼ inches deep	280 lbs.
2312B	44B	Oak Cap	70 lbs.
2312C	44C	Five Drawer Section—Drawers 2¼ inches deep	235 lbs.
2312G	44G	Plain Base—4 inches high	55 lbs.
2312H	44H	Sanitary Base—5¾ inches high	40 lbs.

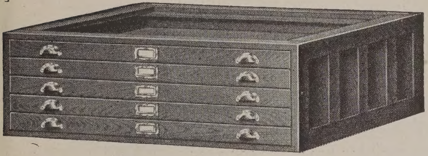
OAK SECTIONAL PLANFILE CABINETS



A Unit



B Unit



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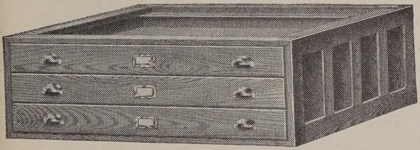
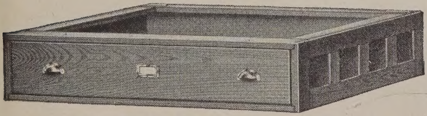
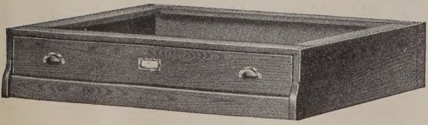


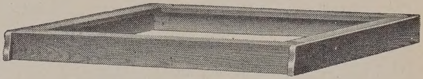
D Unit



E Unit



F Unit



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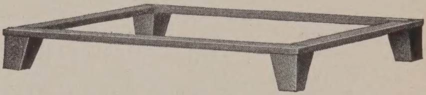

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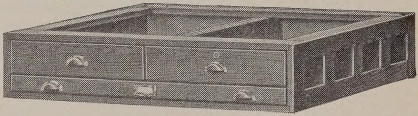
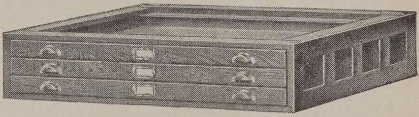
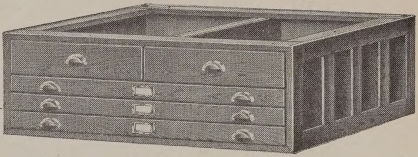


K Unit



L Unit



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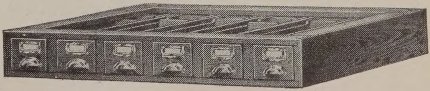

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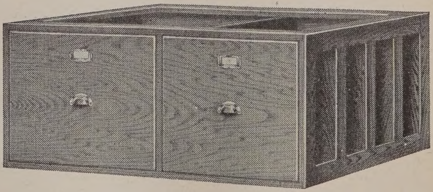


R Unit

STEEL UNITS No. 2313 (Hamilton—2436 Line)

These Cabinets are for Plans 24x36 inches and are 25x37 inches inside.

Post No.	Hamilton No.		Shipping Weight
2313A	1829	Five Drawer Unit with Cap—Drawers 2 inches deep....	265 lbs.
2313B	1835	Cap	40 lbs.
2313C	1830	Five Drawer Unit—Drawers 2 inches deep...........	250 lbs.
2313D	1831	Three Drawer Unit—Drawers 3¾ inches deep.........	235 lbs.
2313E	1825	One Drawer Unit—Drawer 7½ inches deep...........	145 lbs.
2313G	1837	Flush Base	40 lbs.
2313H	1841	Sanitary Base 12 inches	55 lbs.
2313J	1839	Sanitary Base 23 inches	65 lbs.
2313L	1826	Three Drawer Unit—Drawers 2 inches deep...........	175 lbs.
2313P	1840	Card File Unit—5 Drawers for 3x5 or 4x6 Cards.......	130 lbs.
2313R	1890	Two Drawers, for Vertical Plan Filing...............	225 lbs.
2313S	1860	Four Drawers, for Vertical Art Filing................	214 lbs.
2313T	1828	Six Drawer Unit—Drawers 2¼ inches deep...........	305 lbs.
2313U	1836	Five Drawer Unit with 12-inch Sanitary Base—Drawers 2 inches deep	310 lbs.
2313V	1874	Six-inch Sanitary Base Legs.......................	

STEEL UNITS No. 2314 (Hamilton—3042 Line)

These Cabinets are for Plans 30x42 inches and [illegible]

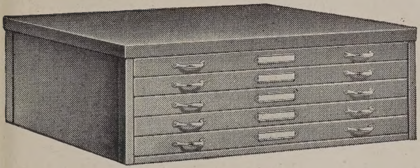
2314A	1847	Five Drawer Unit with Cap—Drawers 2 inches deep	360 lbs.
2314B	1853	Cap	50 lbs.
2314C	1848	Five Drawer Unit—Drawers 2 inches deep...........	310 lbs.
2314D	1849	Three Drawer Unit—Drawers 3¾ inches deep.........	275 lbs.
2314E	1843	One Drawer Unit—Drawers 7½ inches deep..........	170 lbs.
2314G	1855	Flush Base	50 lbs.
2314H	1861	Sanitary Base, 12 inches	70 lbs.
2314J	1857	Sanitary Base, 23 inches	80 lbs.
2314L	1844	Three Drawer Unit—Drawers 2 inches deep...........	220 lbs.
2314P	1858	Card File Unit—6 Drawers for 3x5 or 4x6 Cards.....	165 lbs.
2314T	1850	Six Drawer Unit—Drawers 2¼ inches deep..........	390 lbs.
2314U	1854	Five Drawer Unit with 12-inch Sanitary Base—Drawers 2 inches deep	440 lbs.
2314V	1874	Six-inch Sanitary Base Legs	

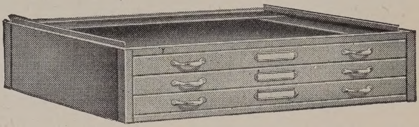
STEEL UNITS No. 2315 (Hamilton—3648 Line)

These Cabinets are for plans 36x48 inches and are 38x50 inches inside.

2315B	1867	Cap	65 lbs.
2315C	1868	Five Drawer Unit—Drawers 2¼ inches deep..........	460 lbs.
2315G	1873	Flush Base	70 lbs.
2315H	1912	Sanitary Base, 12 inches	135 lbs.
2315V	1874	Six-inch Sanitary Base Legs.......................	

STEEL SECTIONAL PLANFILE UNITS


A Unit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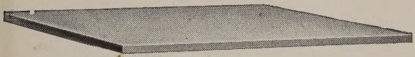
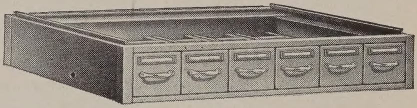
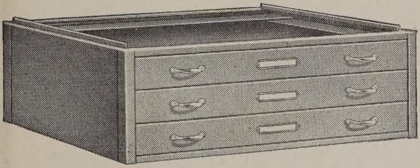

B Unit


P Unit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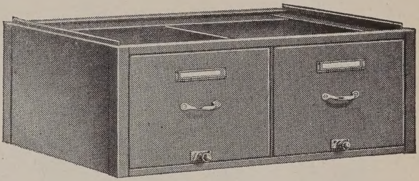
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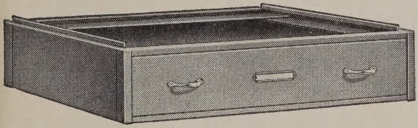
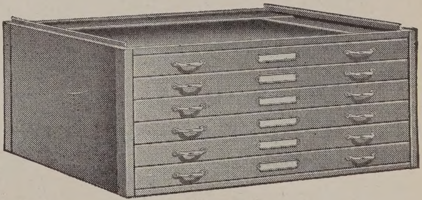

E Unit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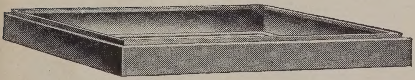
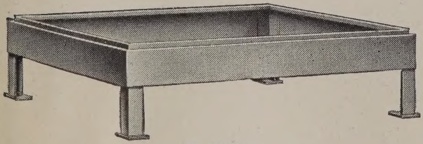
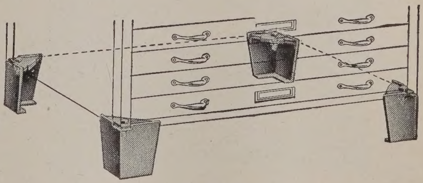

G Unit


H Unit


V Unit

HAMILTON-CALUMET 12-DRAWER UNIT

The 12-Drawer Hamilton-Calumet Plan File has a total capacity of 1,200 tracings or 100 tracings to each drawer.

This File is equipped with a Tracing Lifter which eliminates the difficulty of removing and refiling tracings. This Tracing Lifter is made of metal and acts as a Compressor when closed. Tracings are always held flat, free from curl.

The back of the drawer is adjustable to fit your tracing sizes, thus eliminating shifting the sheets as drawer is opened or closed.

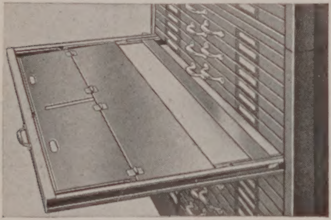


Fig. 1

Fig. 1 shows this adjustable back, also Tracing Lifter in closed position.

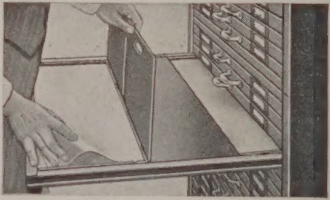


Fig. 2

Fig. 2 shows the operator turning back the front of the lifter preparatory to selecting the tracing desired.

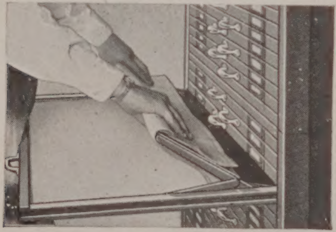


Fig. 3

Fig. 3 shows the operation after locating the correct tracing. All sheets above the selected sheet are turned back over the lifter. The lifter is then raised to a vertical position, thus removing the pressure from the sheet desired. When lifter is in this position, the sheets which are thus lifted need not be held in position by hand or other means.

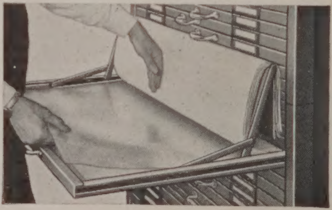


Fig. 4

Fig. 4 shows the lifter in vertical position and operator removing the tracing. He holds the back of his left hand lightly against the tracings while withdrawing the selected sheet.

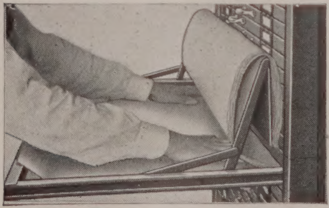
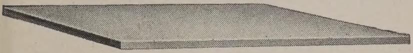


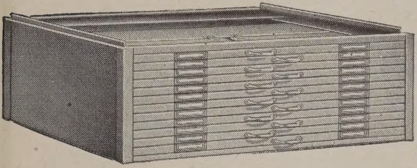
Fig. 5

Fig. 5 shows the manner of refiling tracings. Placing the tracing on the drawer, the operator lays his hands flat on the sheet and gently pushes it toward the back of the drawer. The fingers will raise the tail end of the sheets on lifter, releasing any pressure.

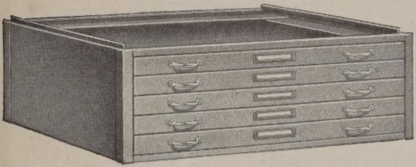
HAMILTON-CALUMET UNITS



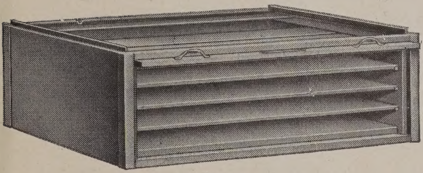
A Unit



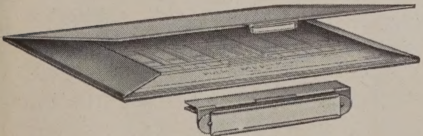
B Unit



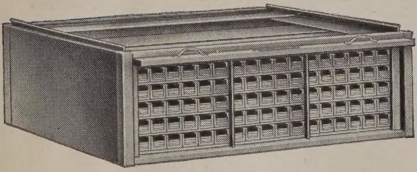
C Unit



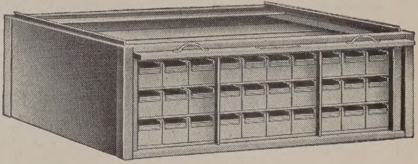
D Unit



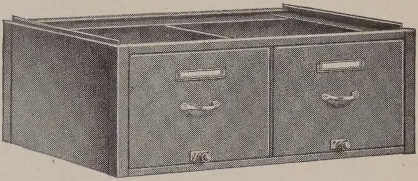
E Unit



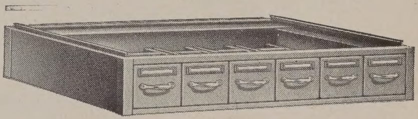
F Unit



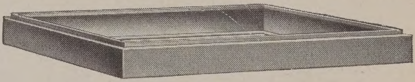
G Unit



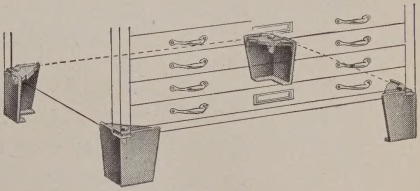
H Unit



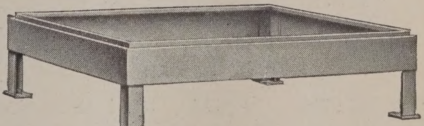
K Unit



L Unit



M Unit



P Unit

HAMILTON-CALUMET UNITS No. 2316

These Cabinets are for Plans 24x36 inches (Hamilton—24036 Line)

Post No.	Hamilton No.		Shipping Weight
2316A	19083	One-inch Cap Unit—Size 43 5/16x33¼x⅞	45 lbs.
2316B	19084	12 Drawer Unit—Drawers inside 37 15/16x28¾x¾	575 lbs.
2316C	19085	5 Drawer Unit—Drawers inside 39½x29⅛x1¾	275 lbs.
2316D	19086	Shelf Filing Unit—Outside 43 5/16x32½x15⅜	190 lbs.
2316E	19088	Tracing Folders—Size 38½x28 or 19¼x28	
2316F	19089	Roll Tracing Units—95 Trays 31 inches long	360 lbs.
2316G	19090	Roll Tracing Unit—33 Trays 31 inches long	220 lbs.
2316H	19092	2 Drawer Vertical Plan File Unit—Drawers inside 19⅛x27x12½	265 lbs.
2316J	19092A	3 Drawer Vertical Plan File Unit—Drawers inside 12 5/16x27x12½	270 lbs.
2316K	19093	Card File Unit—5 Drawers for 3x5 or 4x6 Cards	145 lbs.
2316L	19095	Four-inch Flush Base Unit—Size 43 5/16x32½x4	45 lbs.
2316M	18074	Six-inch Sanitary Base Legs	
2316P	19097	Twelve-inch Sanitary Base Unit—Size 43 5/16x32½x12	60 lbs.

HAMILTON-CALUMET UNITS No. 2317

These Cabinets are for Plans 30x42 inches (Hamilton—30042 Line)

2317A	18053	One-inch Cap Units—Size 49 5/16x39¼x⅞ . . .	50 lbs.
2317B	18093	12 Drawer Unit—Drawers inside 43 15/16x34¾x¾	630 lbs.
2317C	18048	5 Drawer Unit—Drawers inside 45½x35⅛x1¾	310 lbs.
2317D	18095	Shelf Filing Unit—Outside 49 5/16x38½x15⅜	210 lbs.
2317E	19052	Tracing Folders—Size 44½x34 or 22¼x34	
2317F	18098	Roll Tracing Unit—110 Trays 37 inches long	375 lbs.
2317G	18099	Roll Tracing Unit—39 Trays 37 inches long	260 lbs.
2317K	18058	Card File Unit—6 Drawers for 3x5 or 4x6 Cards	165 lbs.
2317L	18055	Four-inch Flush Base Unit—Size 49 5/16x38½x4	50 lbs.
2317M	18074	Six-inch Sanitary Base Legs	
2317P	18061	Twelve-inch Sanitary Base Unit—Size 49 5/16x38½x12	70 lbs.

HAMILTON-CALUMET UNITS No. 2318

These Cabinets are for Plans 36x48 inches (Hamilton—36048 Line)

Post No.	Hamilton No.		Shipping Weight
2318A	18067	One-inch Cap Unit—Size 55 5/16x45¼x⅞	65 lbs.
2318B	19004	10 Drawer Unit—Drawers inside 49 15/16x41x 13/16	675 lbs.
2318C	18068	5 Drawer Unit—Drawers inside 51½41⅛x1¾	460 lbs.
2318D	19006	Shelf Filing Units—Outside 55 5/16x44½x15⅜	250 lbs.
2318E	19053	Tracing Folders—Size 50½x40	
2318F	19009	Roll Tracing Unit—125 Trays 43 inches long	400 lbs.
2318G	19010	Roll Tracing Unit—42 Trays 43 inches long	300 lbs.
2318L	18073	Four-inch Flush Base Unit—Size 55 5/16x44½x4	70 lbs.
2318M	18074	Six-inch Sanitary Base Legs	
2318P	19012	Twelve-inch Sanitary Base Units—Size 55 5/16x44½x12	135 lbs.

HAMILTON-CALUMET UNITS No. 2319

These Cabinets are for Plans 42x72 inches (Hamilton—42072 Line)

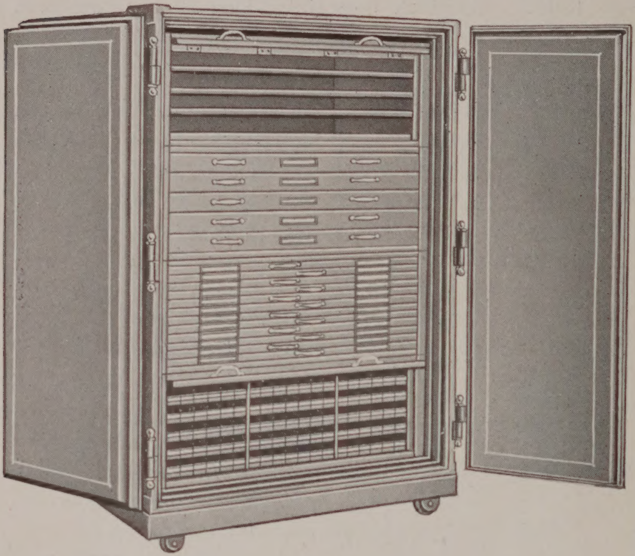
2319A	19015	One-inch Cap Unit—Size 79 5/16x51¼x⅞	150 lbs.
2319B	19017	6 Drawer Unit—Drawers inside 73⅝x46⅝x 13/16	1,185 lbs.
2319C	19016	5 Drawer Unit—Drawers inside 75½x47⅛x1½	600 lbs.
2319F	19022	Roll Tracing Unit—180 Trays 49 inches long	500 lbs.
2319G	19023	Roll Tracing Unit—60 Trays 49 inches long	400 lbs.
2319L	19025	Four-inch Flush Base Unit—Size 79 5/16x50½x4	125 lbs.
2319M	18074	Six-inch Sanitary Base Legs	

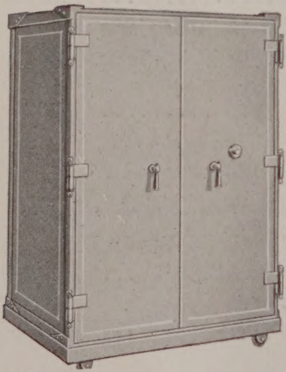
HAMILTON-CALUMET UNITS No. 2320

These Cabinets are for Plans 25x59 inches (Hamilton—25059 Line)

2320A	19030	One-inch Cap Unit—Size 65 5/16x31¼x⅞	95 lbs.
2320B	19032	8 Drawer Unit—Drawers inside 59 15/16x27⅞x 13/16	675 lbs.
2320C	19031	5 Drawer Unit—Drawers inside 61½x27⅛x1¾	375 lbs.
2320D	19034	Shelf Filing Unit—Outside 65 5/16x30½x15⅜	220 lbs.
2320E	19055	Tracing Folders—Size 60½x26	
2320L	19037	Four-inch Flush Base Unit—Size 65 5/16x30½x4	85 lbs.
2320M	18074	Six-inch Sanitary Base Legs	

HAMILTON-CALUMET PLAN FILE SAFE





Manufacturing concerns having valuable plans or tracings which they would like to protect from fire and theft will find this safe well adapted to their needs.

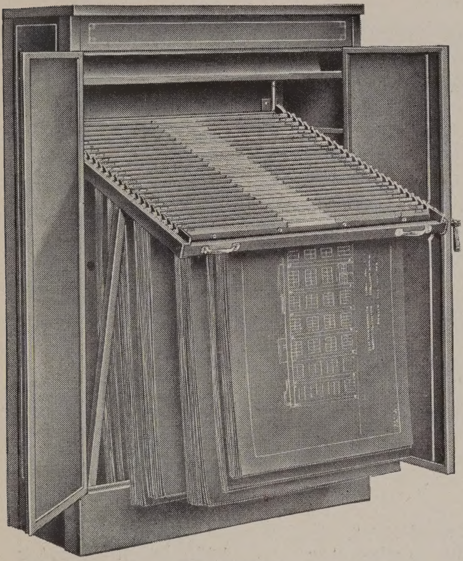
It is as fireproof as it is possible to make a safe of this type. It is also theft-proof to the extent that it will resist any ordinary efforts to tamper with the contents. The combination dial and locking mechanism are first quality in every respect.

This safe is made to accommodate four Hamilton-Calumet Units, in any combination. The above illustration shows it equipped with one shelf filing unit, one 5-drawer unit, one 12-drawer unit, and one roll tracing unit. Units are furnished at extra cost.

The safe is shipped set up to take a low freight rate, but is manufactured so it can be knocked down to go through the smallest doorway. It is then set up again in the room or vault it is to occupy. Full instructions are furnished for knocking down and also for setting up.

Post No.	Hamilton Safe No.	Hamilton Line No.	
2324A.	19074	24036	Hamilton-Calumet Plan File Safe
2324B.	19076	30042	Hamilton-Calumet Plan File Safe
2324C.	19078	36048	Hamilton-Calumet Plan File Safe
2324D.	19080	42072	Hamilton-Calumet Plan File Safe
2324E.	19082	25059	Hamilton-Calumet Plan File Safe

HAMILTON-CALUMET VERTICAL PLAN FILE



No. 2325A

The Vertical Plan File is designed to efficiently handle reference plans, maps, charts, etc. It requires only a small amount of floor space.

The cut to the left shows the file rack pulled out for removal of binders which hold the plans. There are 26 binders and each binder will hold 100 sheets.

It is not necessary to punch holes in plans. The binder clamps and holds securely at all times without danger of slipping. The sheets or sets of plans are easily removed or placed in the binders.

When a set or group of plans are wanted for reference, the correct binder is located by indication on label holder and lifted from the rack. The illustration below shows the manner of replacing sets on the rack.

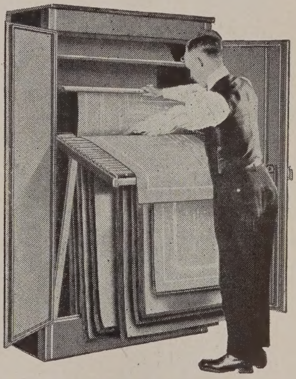
THE HAMILTON-CALUMET VERTICAL PLAN FILE will take any size sheets or plans up to the maximum size as listed below.

COMPACT—This File takes only 18 inches in depth of floor space. The rack is closed by pushing downward on the lower end. The rack then moves back and upward into the cabinet and stands nearly vertical.

CAPACITY—This file has a capacity of 2,600 sheets. The shelf above can be used for storage of paper, tracing cloth, etc. All Hamilton-Calumet Files will take plans from 36 to 70 inches in length. The short sets should be filed toward the front of the rack and the long sets to the rear.

MATERIAL AND FINISH: Made of good quality furniture steel, finished olive green, baked enamel.

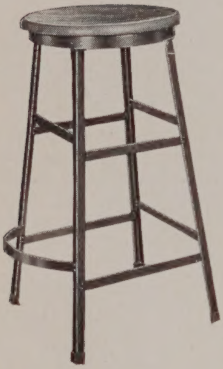
STYLE OF RACKS—The rack holding the binders is made in three styles, namely: Plain, Style A and Style B. All Vertical Files are equipped with the Plain Rack, which holds 26 binders—the maximum size each cabinet will accommodate. Style A and B Racks are subdivided and will be supplied in place of the Plain Rack when so ordered.



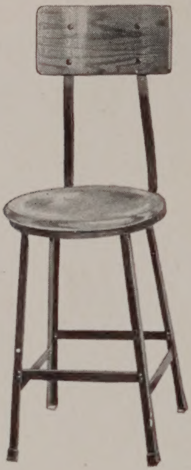
No. 2325A

Post No.	Hamilton No.	Maximum Filing Size	Style of Rack	Shipping Weight
2325A	1875	24 x 70″	Plain	450 lbs.
2325B	1876	30 x 70″	Plain	495 lbs.
2325C	1877	36 x 70″	Plain	550 lbs.
2325D	1878	42 x 70″	Plain	625 lbs.
2325E	1879	48 x 70″	Plain	700 lbs.

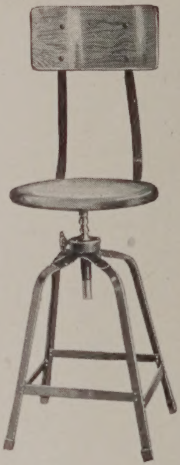
DRAFTSMEN'S STOOLS



Round Seat
13½ in. in diameter
No. 2326—A to J



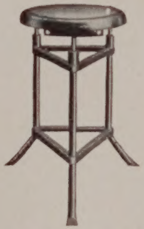
Round Seat
13½ in. in diameter
No. 2327—A to J



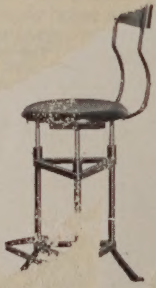
Round Seat
13½ in. in diameter
No. 2328—A to E

HEIGHT OF STOOLS
Nos. 2326 and 2327
A—18 in.
B—20 in.
C—22 in.
D—24 in.
E—26 in.
F—28 in.
G—30 in.
H—32 in.
I—34 in.
J—36 in.

No. 2328—Adjustable
A—17 in. to 21 in.
B—20 in. to 24 in.
C—23 in. to 27 in.
D—26 in. to 30 in.
E—29 in. to 33 in.

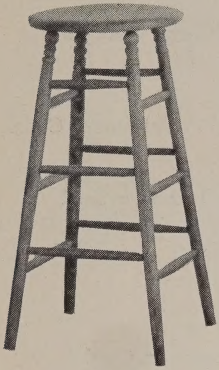


No. 2329
Height: Adjustable
20 in. to 30 in.
Hardwood Seat
12½ in. in diameter

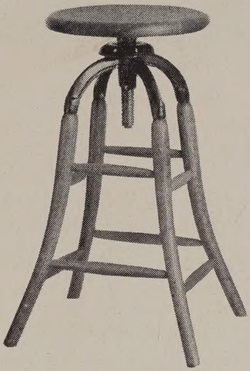


[illegible]29B
Same [illegible] No. 2329,
but equipped
with back rest
and foot rest

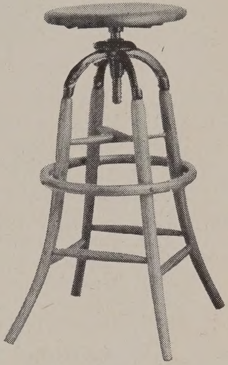
DRAFTSMEN'S STOOLS



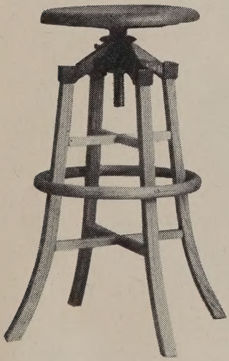
30 in. High
Seat 13¾ in. Diameter
No. 2329C



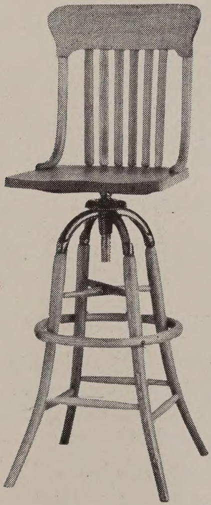
26 in. High
Seat 13 in. Diameter
Quartered Oak
No. 2329D



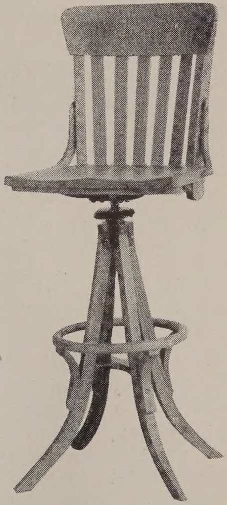
31 in. High
Seat 14 in. Diameter
Quartered Oak
No. 2329E



30 in. High
Seat 14 in. Diameter
No. 2329F



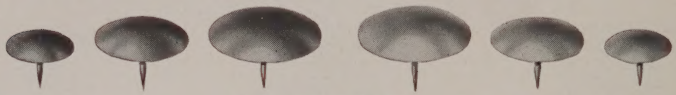
Width of Seat 16½ in.
Height of Back 18 in.
32 in. High
No. 2329G



Width of Seat 18 in.
Height of Back 17 in.
31 in. High
No. 2329H

THUMB TACKS

Standard Brass Thumb Tacks—Packed 1 Dozen on Card



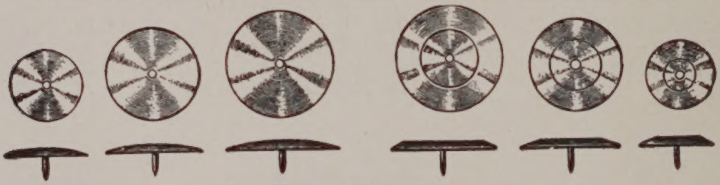
Nos. 2330-2340.

No. 2330. Brass, round heads, ⅜ inch diameter........ Per Doz., Gross,
2332. Brass, round heads, ½ inch diameter........
2334. Brass, round heads, ⅝ inch diameter........

Standard German Silver Thumb Tacks—Packed 1 Dozen on Card

No. 2336. German Silver, round heads, ⅜ inch diameter. Per Doz., Gross,
2338. German Silver, round heads, ½ inch diameter..
2340. German Silver, round heads, ⅝ inch diameter..
2341. German Silver, beveled heads, ⅜ inch diameter..
2342. German Silver, beveled heads, ½ inch diameter..
2343. German Silver, beveled heads, ⅝ inch diameter..

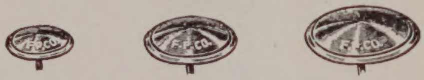
Primo Nickel Silver Thumb Tacks—Packed 1 Dozen on Card



Nos. 2350-2362.

Per Doz., Gross,
No. 2350. Finest Nickel Silver, round heads, ⅜ inch diameter
2351. Finest Nickel Silver, round heads, ½ inch diameter
2352. Finest Nickel Silver, round heads, ⅝ inch diameter
2360. Finest Nickel Silver, beveled heads, ⅜ inch diameter
2361. Finest Nickel Silver, beveled heads, ½ inch diameter
2362. Finest Nickel Silver, beveled heads, ⅝ inch diameter

Steel Thumb Tacks—In Cartons


F.P.CO.
F.P.CO.
F.P.CO.

No. 2364A—2369

Packed 1 Dozen in a Box, 3 Dozen Boxes in a Carton.

No. 2364A. Round Heads, ⅜ inch diameter.................Per Carton,

Packed 100 in a Box, 10 Boxes in a Carton.

No. 2364½. Round Heads, ⅜ inch diameter...........Per 100, Per 1000,
2365½. Round Heads, ⁷⁄₁₆ inch diameter...........
2366½. Round Heads, ½ inch diameter...........

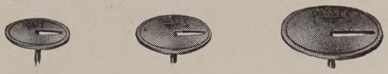
Brass Plated Thumb Tacks—In Cartons

Packed 100 in a Box, 10 Boxes in a Carton

No. 2367. Round Heads, ⅜ inch diameter............Per 100, Per 1000,
2368. Round Heads, ⁷⁄₁₆ inch diameter............
2369. Round Heads, ½ inch diameter............

THUMB TACKS

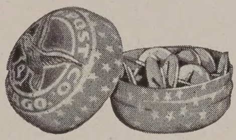
STEEL STAMPED THUMB TACKS IN CARTONS



Made of one piece of hardened steel. Excellent substitute for the regular Thumb Tacks where a lower price is desired.

100 Loose in Cardboard Box, 10 Boxes in a Carton.

No. 2370. Flat Heads, 5/16 inch diameter............Box of 100, of 1000,
2371. Flat Heads, ⅜ inch diameter...........
2372. Flat Heads, ½ inch diameter............
2373. Flat Heads, ⅝ inch diameter............

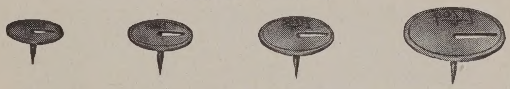


Packed 1 Dozen in Box, 1 Dozen Boxes in a Carton

No. 2370A. 5/16 inch diameter..............Box of One Doz., Per Carton,
2370B. ⅜ inch diameter................
2370C. ½ inch diameter................

ONE-PIECE, CUT-OUT STEEL TACKS

Needle Pointed

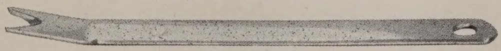


Made of a fine quality of specially hardened steel. Have splendid needle finished points.

Packed 50 in Box, 10 Boxes in a Carton

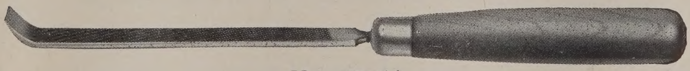
No. 2374A. One Piece, 5/16 inch diameter............Box of 50, Per 1000,
2374B. One Piece, ⅜ inch diameter...........
2374C. One Piece, 7/16 inch diameter...........
2374D. One Piece, ½ inch diameter...........
2374E. One Piece, 9/16 inch diameter...........

TACK LIFTERS



No. 2375.

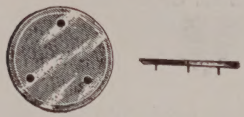
No. 2375. Tack Lifter and Paper Knife, nickel-plated .... Each,



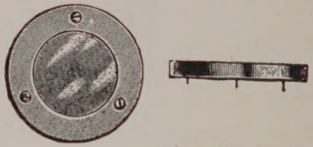
No. 2375A.

Each, Doz.,
No. 2375A. Steel Pencil Pointer, File and Tack Lifter, 7¾ inches..

HORN CENTERS



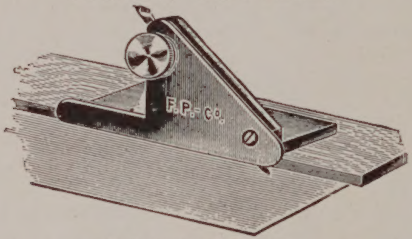
No. 2376.



No. 2378.

No. 2376.	Horn Center, plain, ½-inch diameter....................	Each,
2378.	" " " with German Silver rim, ¾ in. diameter	"

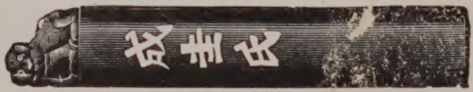
PAPER CUTTERS



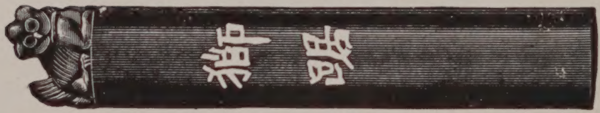
No. 2380.

No. 2380.	Paper Cutter, brass....................................	Each,

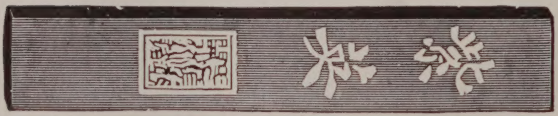
CHINESE OR INDIAN INK



2400.



2401.



2406.

No. 2400.	Oval Lion Head,	2½ inches long...............	Each,
2401.	" " "	3¼ " "	"
2406.	Square Super Super	2⅞ " "	"
2407.	" " "	3⅝ " "	"

THE FREDERICK POST CO.

POST'S STANDARD AMERICAN DRAWING INK

We have made POST'S STANDARD AMERICAN DRAWING INK for over thirty years. Thousands of discriminating Draftsmen and Artists unqualifiedly endorse POST'S INKS.

DRIES QUICKLY

EXTRA WATERPROOF
POST'S
STANDARD
AMERICAN
BLACK
DRAWING INK

POST'S BLACK DRAWING INK

Is the crowning achievement of many years' careful and painstaking research work in our own laboratories in an effort to produce an

EXTRA WATERPROOF INK

which is

FREE FLOWING AND UNSURPASSED FOR WORK OF ANY CHARACTER REQUIRING A DENSE AND OPAQUE LINE.

It is manufactured of pure carbon scientifically compounded with other ingredients and held in perfect suspension resulting in a smooth flowing, absolutely waterproof product over which, when dry, color washes can be applied with safety.

OUR COLORED INKS ARE UNUSUALLY BRILLIANT

They intermix readily. Both Black and Colored Inks, while waterproof, can be used for lines or washes, as they may be thinned with distilled water. The Colored Inks are uniform and true in color and have a particularly brilliant tone.

OUR INKS ARE USED EXTENSIVELY IN THE DRAFTING ROOMS OF A GREAT MANY ESTABLISHMENTS WHERE QUALITY IS THE IMPORTANT FACTOR.

Our Colored Inks can be obtained in the following colors:

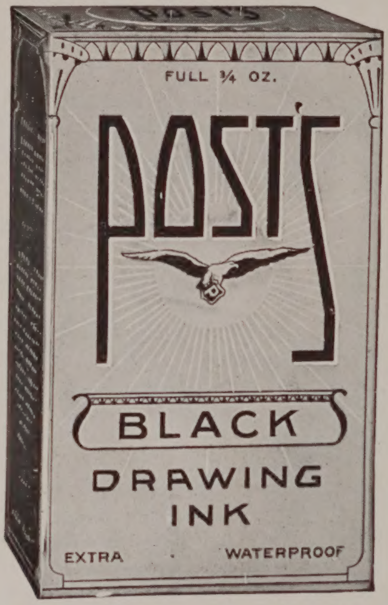
INDIGO
BLUE
VIOLET
BROWN
CARMINE
ORANGE
SCARLET
WHITE
GREEN
YELLOW
VERMILION
BRICK RED

WE WANT YOU TO TRY A SAMPLE BOTTLE

A Generous Sample Sent Postpaid on Request.

POST'S STANDARD AMERICAN DRAWING INK

AN
OLD
FRIEND
IN A
NEW
BOX



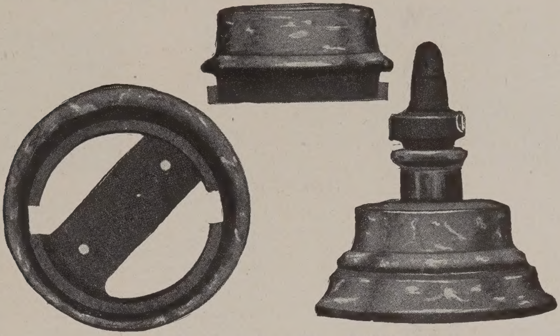
SAMPLE
MAILED
ON
REQUEST

		¾ Ounce	½ Pint	Pint	Quart
No. 2422.	Waterproof, Black .....Each,				
2422A.	Waterproof, Blue.......				
2422B.	Waterproof, Brown				
2422C.	Waterproof, Brick Red..				
2422D.	Waterproof, Carmine....				
2422E.	Waterproof, Green......				
2422F.	Waterproof, Indigo......				
2422G.	Waterproof, Orange.....				
2422H.	Waterproof, Scarlet.....				
2422I.	Waterproof, Vermilion ..				
2422K.	Waterproof, Violet......				
2422L.	Waterproof, Yellow.....				
2422M.	Waterproof, White......				

EMPTY BOTTLES, CORKS AND QUILLS

No. 2423.	Empty ¾-ounce bottles................	Dozen,	Gross,
2424.	Corks with quills	"	"
2425.	¾-ounce bottles with corks and quills....	"	"

INK BOTTLE HOLDERS



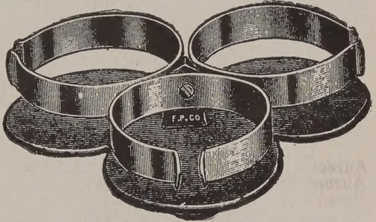
Patented. No. 2432.

No. 2432. **Bottle Holder** for Post's Ink, Oxidized Iron, polished........Each,

No. 2432 is quite a handy bottle holder. It is heavy and will also serve as paper weight.

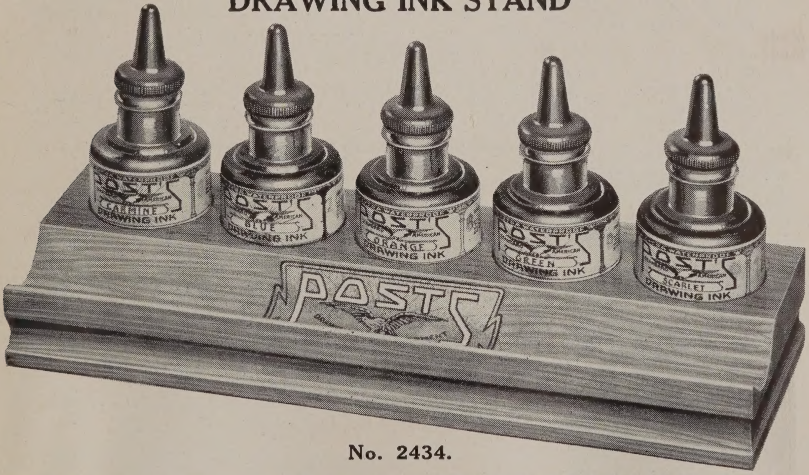
No. 2433. **"Triplex"** Bottle Holder for Post's Ink, made of metal..Each,

No. 2433 will hold three bottles and is very useful where inks of different colors are used.



No. 2433.

DRAWING INK STAND


POST'S
CARMINE
DRAWING INK
POST'S
BLUE
DRAWING INK
POST'S
ORANGE
DRAWING INK
POST'S
GREEN
DRAWING INK
POST'S
SCARLET
DRAWING INK
POST'S

No. 2434.

No. 2434. Post's Drawing Ink Stand, containing five bottles of Post's Inks. Assorted to order..............................Each,

2434A. Stand only....................................... "

WINSOR & NEWTON'S MOIST WATER COLORS

WINSOR & NEWTON
Rathbone Place, LTD.,
LONDON, ENGLAND.
MOIST COLOUR.
ROSE MADDER.
GARANCE ROSE.
ROSA KRAPPLACK.

Whole
Pan

WINSOR & NEW
Rathbone Place
LONDON, ENGLAN
MOIST COLOU
RAW SIENN
SIENNE NATUREL
TERRA DI SIENN

Half
Pan

No. 2542.

- Azure Cobalt
- Cadmium Yellow,
  - Ex. Pale
  - Pale
- Cadmium Yellow
  - Deep
- Cadmium Orange
- Cerulean Blue
- Cobalt Blue
- Cobalt Green
- Cobalt Violet
- Em. Oxide of Chrom.
- French Blue
- French Ultramarine
- Indian Purple
- Indian Yellow, No. 2
- Lemon Yellow
- Mars Orange
- †Mineral Violet
- Orange Vermilion
- Orient Yellow
- Oxide of Chrom.
- " " " Transp.
- †Permanent Mauve
- †Permanent Violet
- Permanent Yellow
- †Pure Scarlet
- Scarlet Vermilion
- Ultra Ash Grey
- Veronese Green
- Viridian

Whole Tubes or Whole Pans....................Each, Dozen,
Half Tubes or Half Pans........................ " "

No. 2542A.

- †Intense Blue
- Spectrum Red
- †Spectrum Violet
- Spectrum Yellow

Whole Tubes or Whole Pans....................Each, Dozen,
Half Tubes or Half Pans........................ " "

No. 2543.

- Aureolin
- Aurora Yellow
- Burnt Carmine
- Carmine
- Cobalt Yellow
- Fields Orange Vermil.
- Gallstone
- New Olive Green
- Primrose Aureolin
- Violet Carmine
- Yellow Carmine

Whole Tubes or Whole Pans....................Each, Dozen,
Half Tubes or Half Pans........................ " "

No. 2543A.

- Madder Carmine
- Madder Lake
- Pink Madder
- Purple Madder
- Rose Dore
- Rose Madder
- Rose Madder, Pink
- Scarlet Madder

Whole Tubes or Whole Pans....................Each, Dozen,
Half Tubes or Half Pans....................... " "

No. 2543½.

- Smalt
- Ultramarine Ash

Whole Tubes or Whole Pans....................Each, Dozen,
Half Tubes or Half Pans....................... " "

† Are not made in Tubes.

HOLMES
WHITE
For
ARTISTS and DESIGNERS
HOLMES WHITE CO., CHICAGO

HOLMES WHITE

An excellent white for photo engravers, lithographers, photo retouchers and designers, and a fine white for watercolor work.

No. 2548. Small Jar, 1 ounce...Each,
2548A. Large Jar, ½ lb...... "

POST'S WHITE PASTE AND PHOTO MOUNTER

ST'S WHITE PAST
Draftsmen's and Photog
this paste.—Water may be
The Frederick Post Co.
Sole Manufacturers of
Extra Waterpoof Drawing Ink

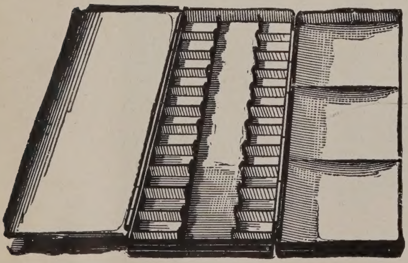
No. 2549

An Excellent Paste for Use in the Drafting Room, Put Up in Air-Tight Glass Jars

No. 2549.	Post's White Paste for Draftsmen, 2 oz. jar.	Each,
2549A.	Post's White Paste for Draftsmen, 4 oz. jar.	
2549B.	Post's White Paste for Draftsmen, 8 oz. jar.	
2549C.	Post's White Paste for Draftsmen, 16 oz. jar.	
2549D.	Post's White Paste for Draftsmen, 32 oz. jar.	
2549E.	Post's White Paste for Draftsmen, ½ gallon	
2549F.	Post's White Paste for Draftsmen, 1 gallon	

EMPTY JAPANNED TIN BOXES

For Moist Colors in Pans

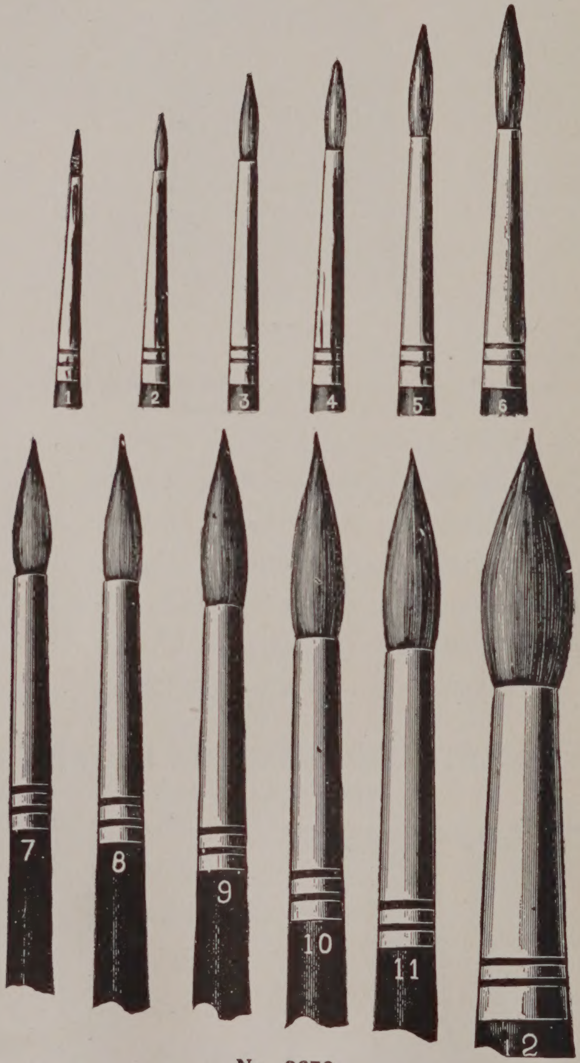


No. 2554.

No. 2550.	For 6 Whole or 12 Half Pans. Each. . .
No. 2551.	For 8 Whole or 16 Half Pans. Each. . .
No. 2553.	For 10 whole or 20 Half Pans. Each. . .
No. 2554.	For 12 Whole or 24 Half Pans. Each. . .
No. 2555.	For 16 Whole or 32 Half Pans. Each. . .
No. 2557.	For 18 Whole or 36 Half Pans. Each. . .
No. 2558.	For 24 Whole or 48 Half Pans. Each. . .

CAMEL HAIR BRUSHES

Illustration Full Size


1
2
3
4
5
6
7
8
9
10
11
12

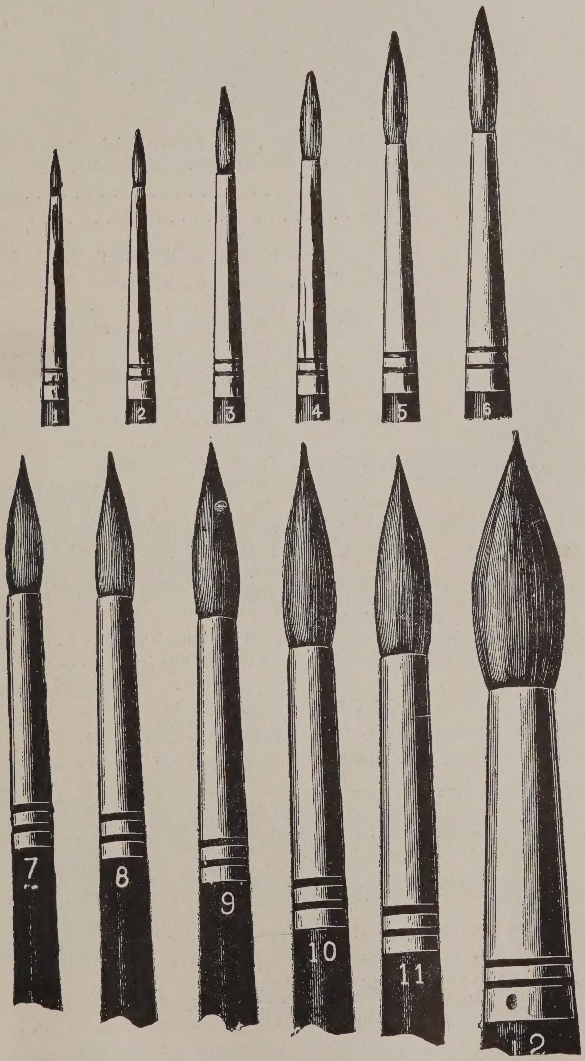
No. 2670.

No. 2670. Camel Hair, in Tin.

No. .. 1 2 3 4 5 6 7 8 9 10 11 12 Each,

RED SABLE BRUSHES

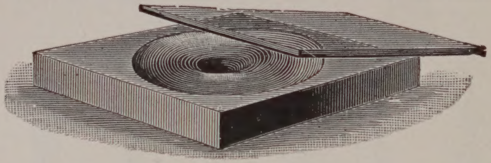
IN ALBATA
Illustrations Full Size


1
2
3
4
5
6
7
8
9
10
11
12

No. 2690.

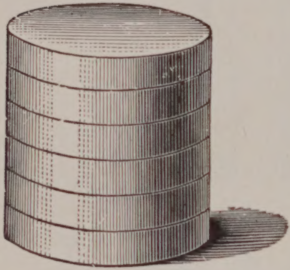
No. 2690. **Red Sable Brushes,** in Albata, with Handle.
Nos. . . . 1 2 3 4 5 6 7 8 9 10 11 12 Each,

INK SLABS AND COLOR DISHES



SLATE INK SLAB has heavy plate glass cover with ground edges which fits air-tight, deep well. Splendid for rubbing Chinese inks.

No. 2700. Size 2¾ in. square ....Each,
2701. Size 3½ in. square ....

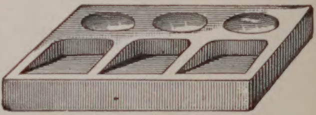


No. 2710.

CHINA CABINET SAUCERS

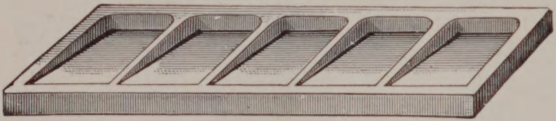
No. 2710. Nest of Cabinet Saucers, 6 in set, 2⅜ in. ....Each,
2711. Nest of Cabinet Saucers, 6 in set, 2⅝ in. ....Each,
2712. Nest of Cabinet Saucers, 6 in set, 3¼ in. ....Each,
2713. Nest of Cabinet Saucers, 6 in set, 3¾ in. ....Each,
No. 2714. Nest of Cabinet Saucers, deep, 4 in set, 2⅝ in..Each,
No. 2715. Nest of Cabinet Saucers, deep, 4 in set, 3¼ in..Each,
No. 2716. Nest of Cabinet Saucers, deep, 4 in set, 3¾ in.........Each,

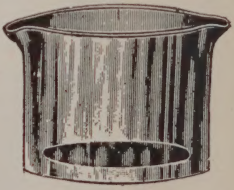
A "Nest of 6," consists of 5 saucers and a cover; a "Nest of 4," 3 saucers and a cover.



NO. 2725 CHINA COLOR DISH.

No. 2725. Color Dish, 3 wells and 3 slopes, 2½x4 in. ......Each,
2725½. Color Dish, 5 wells and 5 slopes, 4 x7½ in. ......





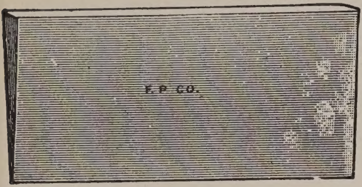
NO. 2732 CHINA COLOR DISH.

No. 2732. Color Dish, 5 divisions, 3⅛x7¾ inches. Each..........................
No. 2733. Color Dish, 6 divisions, 3⅛x7¾ inches...........Each,
2734. Color Dish, 8 divisions, 6 x7⅝ inches............

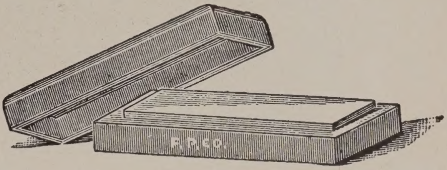
NO. 2750 ARTISTS' WATER GLASSES

No. 2750. Artists' Water Glass, 2⅜ inches diameter..........Each,
2751. Artists' Water Glass, 3¼ inches diameter..........
2752. Artists' Water Glass, 3¾ inches diameter..........

ARKANSAS OIL STONES



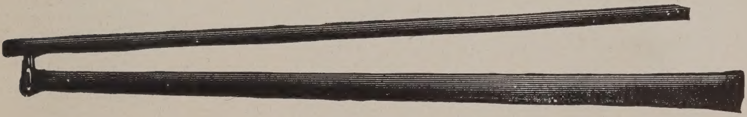
No. 2760.



No. 2763.

No. 2759.	Arkansas Oil Stone, wedge shape slip..................	Each,
2760.	“ “ “ “ “ “	“
2761.	“ “ “ “ about 1¼x3 inches........	“
2762.	“ “ “ “ 1¼x4⅝ “	“
2763.	“ “ “ in case, with cover, 3 inches..........	“
2764.	“ “ “ “ “ 5 “	“

ATOMIZER

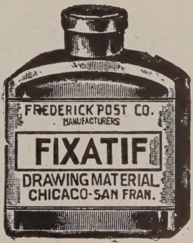


No. 2770.

No. 2770.	Atomizer, nickel-plated, folding....................	Each,

FIXATIF

No. 2775.	Colorless Fixatif for Crayon or Charcoal. Per 2 oz. Bottle......................
2776.	Fixatif—Per ½ Pint ....
2776A.	Fixatif—Per Pint ....
2776B.	Fixatif—Per Quart ....
2776C.	Fixatif—Per Gallon ....

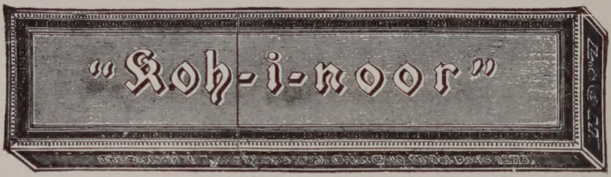

FREDERICK POST CO.
MANUFACTURERS
FIXATIF
DRAWING MATERIAL
CHICACO-SAN FRAN.

No. 2775.

CHARCOAL IN STICKS

No. 2781.	Charcoal Sticks, fine, 50 in a box.................	Per Box,
2782.	Charcoal Conte's Venetian, 50 in a box...........	“
2783.	Rouget, Nos. 1, 2 and 3, 25 in a box..............	“

L. & C. HARDTMUTH'S KOH-I-NOOR PENCILS


"Koh-i-noor"
L & C. H.

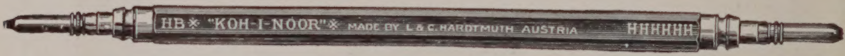
No. 2800.

Koh-i-noor Pencils, Hexagon, Yellow Polish. In degrees as follows:

Per Doz.

No. 2800. 6B, 5B, 4B, 3B, 2B, B, HB, F, H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 9H . . . .

No. 2806. Koh-i-noor Leads, 6 in box, all grades, from 6B to 8H. . . . Per Box,

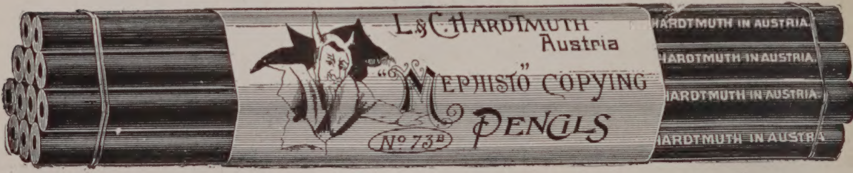

HB ✳ "KOH-I-NOOR" ✳ MADE BY L & C. HARDTMUTH AUSTRIA
HHHHHH

No. 2808.

No. 2808. Koh-i-noor Artists' Pencil, with lead, double pointed. . . . Each,

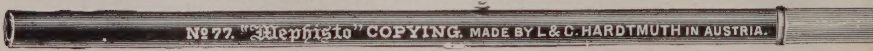
2810. " " " " " single " . . . . "

COPYING PENCILS


L & C. HARDTMUTH
Austria
"MEPHISTO" COPYING PENCILS
No 73B
HARDTMUTH IN AUSTRIA.
HARDTMUTH IN AUSTRIA.
HARDTMUTH IN AUSTRIA.
HARDTMUTH IN AUSTRIA

2814. Mephisto (73B) Copying Pencils.

2815. Mephisto Copying Pencils (73B), Hard.


No 77. "Mephisto" COPYING. MADE BY L & C. HARDTMUTH IN AUSTRIA.

2816. Mephisto (77), with red tips (the Conductor's Pencil).

2817. Mephisto (77), Hard, with red tips (the Conductor's Pencil).

PENCILS

CASTELL DRAWING PENCILS

A.W. FABER
"CASTELL"

No. 2835

No. 2835. Castell Pencils, graded from 6B to 8H....Dozen, Gross,

CASTELL POLYCHROMO COLORED PENCILS

Supplied in 60 Different Shades

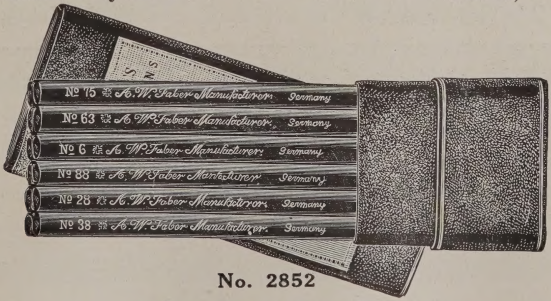
Nº 75
A. W. Faber Manufacturer
Germany

No. 2851

List of Colors

1. White
2. Zinc Yellow
3. Lemon Cadmium
4. Light Chrome
5. Light Cadmium
6. Dark Cadmium
7. Naples Yellow
8. Dark Chrome
9. Orange
10. Terre Verte
11. Olive Green
12. Mineral Green
13. French Green
14. Green Bice
15. Sap Green
16. Hooker's Green No. 1
17. Hooker's Green No. 2
18. Viridian
19. Vegetable Green
20. Prussian Green
21. Light Blue
22. Sky Blue
23. Cobalt Blue
24. Ultramarine
25. Paris Blue
26. Prussian Blue
27. Indigo
28. Delft Blue
29. Red Violet Lake
30. Blue Violet Lake
31. Pink Madder Lake
32. Madder Carmine
33. Rose Pink
34. Carmine Lake
35. Carmine Extrafine
36. Scarlet Lake
37. Saturn Red
38. Pale Vermilion
39. Dark Vermilion
40. Light Ochre
41. Raw Sienna
42. Gold Ochre
43. Burnt Yellow Ochre
44. Brown Ochre
45. Burnt Sienna
46. Venetian Red
47. Brick Red
48. Terra Cotta
49. Indian Red
50. Burnt Carmine
51. Raw Umber
52. Bistre
53. Van Dyke Brown
54. Burnt Umber
55. Sepia
56. Warm Sepia
57. Light Grey
58. Neutral Tint
59. Payne's Grey
60. Ivory Black

No. 2851. Castell Polychromo....................Dozen, Gross,

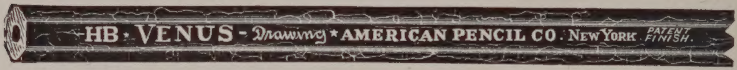

Nº 75 A. W. Faber Manufacturer Germany
Nº 63 A. W. Faber Manufacturer Germany
Nº 6 A. W. Faber Manufacturer Germany
Nº 88 A. W. Faber Manufacturer Germany
Nº 28 A. W. Faber Manufacturer Germany
Nº 38 A. W. Faber Manufacturer Germany

No. 2852

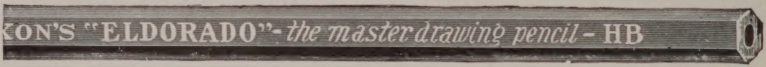
Assortment 12 in Box

No. 2852. Castell Polychromo Assortment.................Per Box,

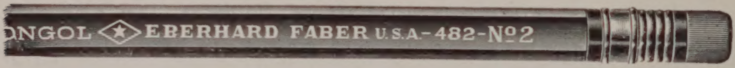
PENCILS


HB · VENUS - Drawing ★ AMERICAN PENCIL CO. NEW YORK. PATENT FINISH.

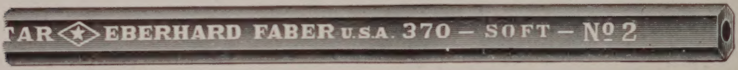
No. 2860. Venus Pencils, Hexagon, Dark Green Polish, Gold Stamped. In degrees as follows: 6B, 5B, 4B, 3B, 2B, B, HB, F, H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 9H.................. Doz., Gross,


ON'S "ELDORADO"- the master drawing pencil - HB

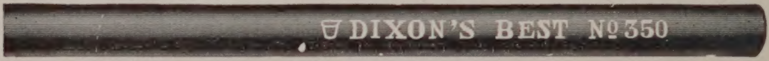
No. 2861. Eldorado Pencils, Hexagon, Yellow Polish, Gold Stamped. In degrees as follows: 6B, 5B, 4B, 3B, 2B, B, HB, F, H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 9H...................... Doz., Gross,


NGOL ★ EBERHARD FABER U.S.A.-482-No 2

No. 2863. E. Faber Mongol Pencils, Hexagon, Rubber Tipped. In four degrees, as follows: Nos. 1, 2, 3, 4......... Doz., Gross,

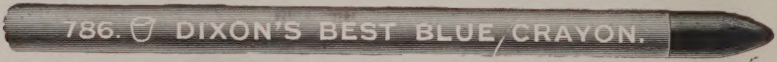

AR ★ EBERHARD FABER U.S.A. 370 — SOFT — No 2

No. 2864. E. Faber's "Star" Detail Pencils, graded from 1 to 5. .... Doz., Gross,

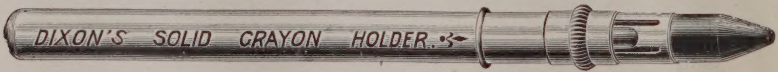

DIXON'S BEST No 350

No. 2867. Dixon Best Colored Pencil Crayons........... Doz., Gross,

1. Pink
2. Red
3. Carmine Red
4. Lake Red
5. Terra Cotta
6. Blue
7. Light Blue
8. Indigo Blue
9. Yellow
10. Orange
11. Green
12. Olive Green
13. Brown
14. Sepia
15. Violet


786. DIXON'S BEST BLUE CRAYON.

No. 2868A. Dixon Best Solid Crayons, Black, round, 3½ in.
2868B. Dixon Best Solid Crayons, Red, round, 3½ in.
2868C. Dixon Best Solid Crayons, Blue, round, 3½ in.
2868D. Dixon Best Solid Crayons, Yellow, 3½ in.
2868E. Dixon Best Solid Crayons, Green, 3½ in.


DIXON'S SOLID CRAYON HOLDER.

No. 2870. Dixon Solid Crayon Holder, nickel-plated, 6½ in., for Crayons. Nos. 3272A-3272E .... Dozen, Gross,

UNIQUE COLORED PENCILS

Unique Colored Pencils have a thin high quality lead, are light in weight, hexagon shaped and easy to sharpen. They are especially adapted for use in writing, checking, figuring, marking blue prints, drawing fine lines, etc. Ideal for draftsmen, teachers and all other vocations where checking in different colors is necessary.

UNIQUE
THIN LEAD
BLUE
AMERICAN PENCIL CO. N.Y.
-1206

No. 2872

No. 2872A.	Unique,	Red,	Thin lead	Doz.,	Gross,
2872B.	“	Blue	“ “	“	“
2872C.	“	Green	“ “	“	“
2872D.	“	Yellow	“ “	“	“
2872E.	“	White	“ “	“	“
2873.	“	Assortment of 12 colors			Each,

MONGOL COLORED PENCILS

Indelible Thin Lead

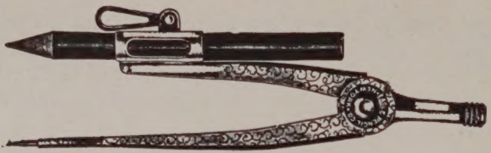
In Mongol Colored Pencils, the lead, though brilliant in color and easy to use, can be sharpened to a needle point and retains its point three or four times longer than any ordinary colored pencil on the market.

These Pencils can be used for coloring photographs (preferably unglazed paper), sketches, drawings or for obtaining wash color effects on mechanical drawings with much greater neatness and efficiency and less trouble than so-called “water colors.” One shades in the desired colors with the pencil and then “washes” them over with an ordinary artist’s paint brush, dipped in water.

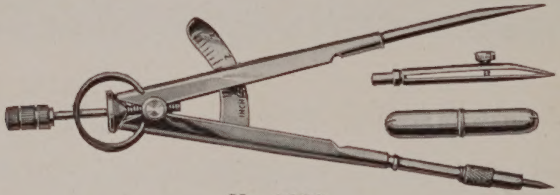
EBERHARD FABER
MADE IN U.S.A.
MONGOL
COLORED INDELIBLE
866

No. 2876A.	Mongol,	Purple,	Thin Lead	Doz.,	Gross,
2876B.	“	Light Blue	“ “	“	“
2876C.	“	Pink	“ “	“	“
2876D.	“	Light Green	“ “	“	“
2876E.	“	Black	“ “	“	“
2876F.	“	Orange	“ “	“	“
2876G.	“	Brown	“ “	“	“
2876H.	“	Heliotrope	“ “	“	“
2876J.	“	Dark Blue	“ “	“	“
2876K.	“	Red	“ “	“	“
2876L.	“	Yellow	“ “	“	“
2876M.	“	Dark Green	“ “	“	“
2877.	“	Assortment of 12 colors			Each,

PENCIL COMPASSES

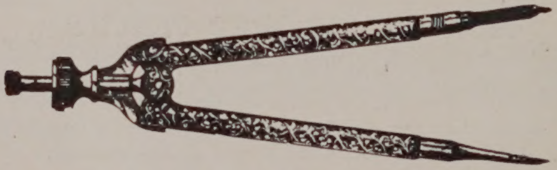


No. 2881. Pencil Compass—One dozen in Box............Per Dozen,



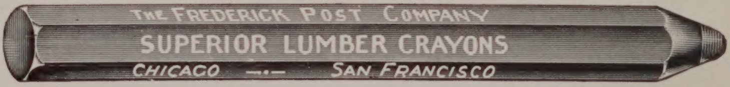
No. 2882

No. 2882. Compass Protractor..........................Per Dozen,



No. 2883. Divider and Compass, each in box with extra leads. Per Dozen,

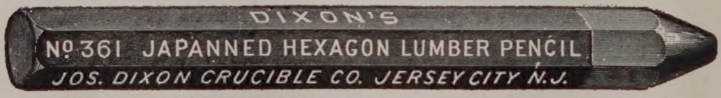
POST'S SUPERIOR LUMBER AND METAL CRAYONS


THE FREDERICK POST COMPANY
SUPERIOR LUMBER CRAYONS
CHICAGO — SAN FRANCISCO

No. 2885

Per Dozen Per Gross

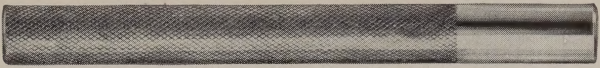
No. 2885. **POST'S** Superior Lumber Crayons, Hexagon. Colors, red, blue and black.


DIXON'S
Nº 361 JAPANNED HEXAGON LUMBER PENCIL
JOS. DIXON CRUCIBLE CO. JERSEY CITY N.J.

No. 2885½

Per dozen

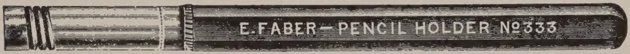
No. 2885½. Dixon's Lumber Crayons, Hexagon; colors, red, blue and black.



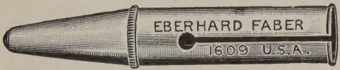
No. 2886

No. 2886. **POST'S** Pencil Holders.................Each, Doz.,

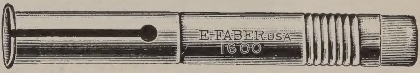
2886A. Double End Aluminum................. " "


E. FABER—PENCIL HOLDER Nº 333

No. 2887. E. Faber's Pencil Holder.................Each, Doz.,

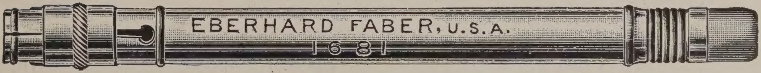

EBERHARD FABER
1609 U.S.A.

No. 2888A


E. FABER U.S.A.
1600

No. 2888

		Each,	Doz.,
No. 2888.	E. Faber's Pencil Point Protector, hexagon, with rubber		
2888A.	E. Faber's Pencil Point Protector, round taper point		


EBERHARD FABER, U.S.A.
1681

No. 2889. Point Protector, 4 inches long, with eraser...Each, Doz.,

A complete assortment of illustrations and suggestions for using pencils, pencil holders and pencil point protectors for advertising purposes is available. We are in position to furnish our well-known Corona and Detail brands with special imprint, also many other popular grades. Full information and prices sent on request.

A CLEANING ERASER
NO GRIT
ARTGUM
NO GREASE
THE FREDERICK POST CO. CHICAGO

No. 2914B

		Dozen	Gross
No. 2914A.	Art Gum, size 1 x1 x1		
2914B.	“ “ “ 1⅛x1⅛x1⅛		
2914C.	“ “ “ 2 x1 x1		
2914D.	“ “ “ 2½x1⅛x1⅛		
2914E.	“ “ “ 3 x2 x1		
2914F.	“ “ “ 3 x3 x2		

POSTS
CARDINAL ERASER

No. 2938

	Each	Per Dozen
No. 2938. Post's **CARDINAL RED** Eraser...........		

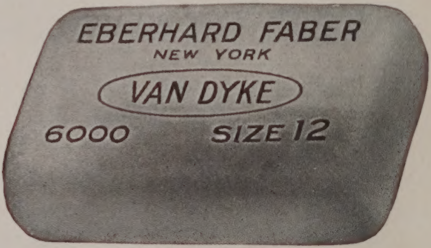
POSTS
INK-WELDED-PENCIL

No. 2940

	Each	Per Dozen
No. 2940. Post's Ink and Pencil Eraser.............		

E. FABER'S
KNEADED RUBBER
No. 1224.
NEW YORK, U. S. A.
No. 1224.

No. 2944

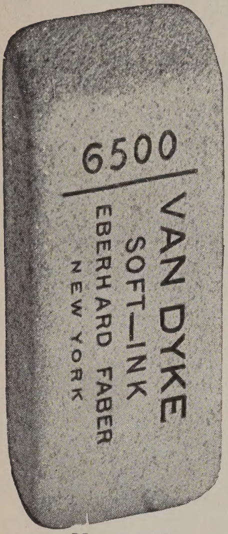

EBERHARD FABER
NEW YORK
VAN DYKE
6000
SIZE 12

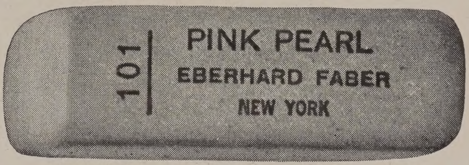
No. 2945

	Each	Pound
No. 2944. E. Faber's Kneaded Rubber, small, 25 to lb....		
2944½. E. Faber's Kneaded Rubber, large, 12 to lb....		

	Pound
2945. E. Faber's Van Dyke Eraser, size 12, 20, 30, 40	

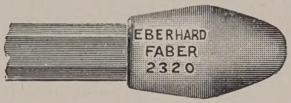
E. FABER CO. ERASERS


6500
VAN DYKE
SOFT—INK
EBERHARD FABER
NEW YORK


101
PINK PEARL
EBERHARD FABER
NEW YORK

No. 2948

No. 2948. Pink Pearl ....Doz., Gross,
2948½. Pink Pearl (Small)..Doz., Gross,

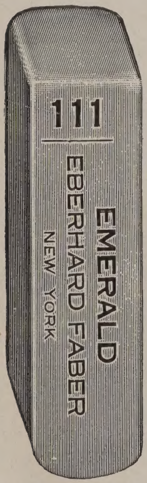

EBERHARD
FABER
2320

No. 2949

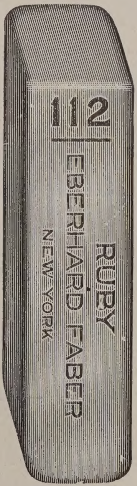
No. 2949. Helmet ....Doz., Gross,

Doz. Gross
No. 2946. Large, Van Dyke, Soft, Ink Eraser.
2947. Small, Van Dyke, Soft, Ink Eraser.

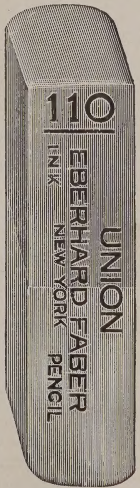
No. 2946.


111
EMERALD
EBERHARD FABER
NEW YORK

No. 2950


112
RUBY
EBERHARD FABER
NEW YORK

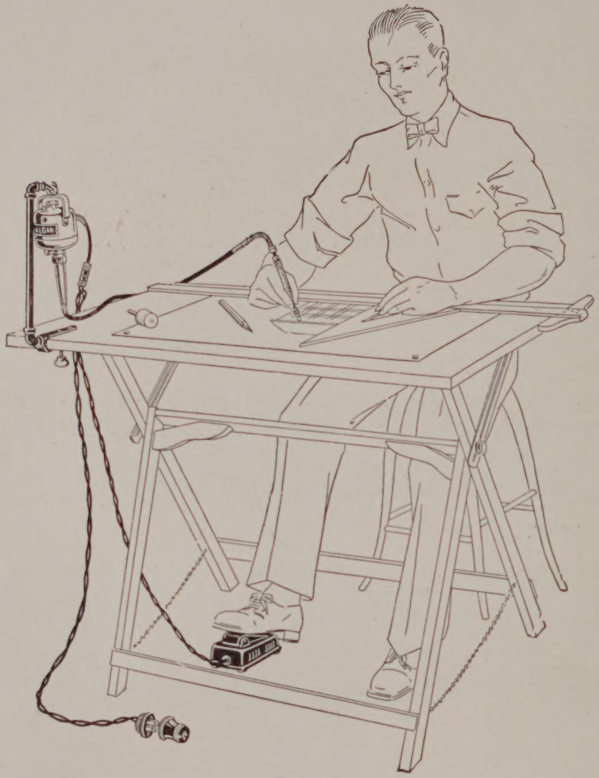
No. 2952


110
INK
UNION
EBERHARD FABER
NEW YORK
PENCIL

No. 2954

No. 2950. Emerald Green, small......................Doz., Gross,
2951. " " large......................
2952. Ruby Red, small.........................
2953. " " large ....
2954. Combination Ink and Pencil.................

ELGAR FLEXIBLE SHAFT ERASING MACHINE



No. 2955

The Elgar Flexible Shaft Erasing Machine is one of the finest and most fully equipped erasing machines built.

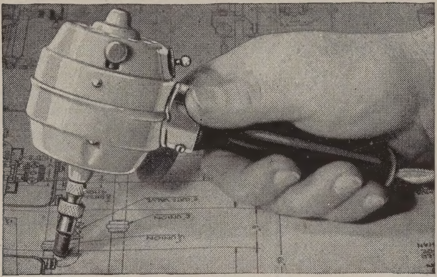
The foot control feature regulates the eraser speed and the switch for turning motor on and off—it allows both hands to be free on the board, enabling you to erase fine lines and lettering at the most delicate points of your drawing.

The Elgar is out of the way when not in use, but right at your call when you need it. The motor runs on any 110-volt lighting circuit.

Each machine is equipped with 2 small eraser holders, 1 large eraser holder, 1 plain mandrel, 1 dozen small erasers, 1 dozen large cylinder erasers.

No. 2955. Hanging Type, Duplex Spring Shaft..................Each
2955A. Bench Type, Duplex Spring Shaft.....................
2955B. Hand Type, lighter in weight, but made with the same care and precision as the Hanging and Bench Types.........
2955C. Japanned arm with hook for hanging bale, clamp fastens to drawing board or table.........................

TOM THUMB ELECTRIC ERASING MACHINE



Tom Thumb is small and easy to handle. His starting and stopping switch is right at your thumb tip. He will save hours of time and energy in your office.

Current consumption is one-quarter cent per hour.

Motor operates on either A.C. or D.C. 60 cycles or less—110 volts.

Furnished with 5½ feet of cord and standard lamp socket.

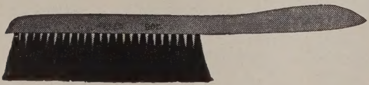
Packed in carton with one dozen erasers.

No. 2956. Tom Thumb Electric Erasing Machine.................Each

ERASERS FOR ELECTRIC ERASING MACHINES

No. 2957A	**No. 2957B**	**No. 2957C**	**No. 2957D**	**No. 2957E**
Soft Red	Green	Light Grey	Parawhite	Pink Pliable
Per Doz............				

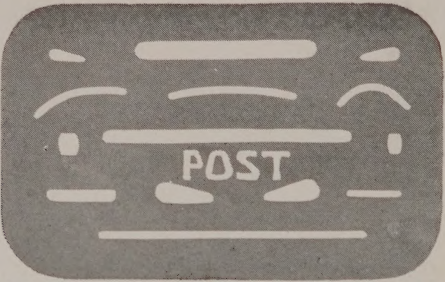
DUSTING BRUSHES



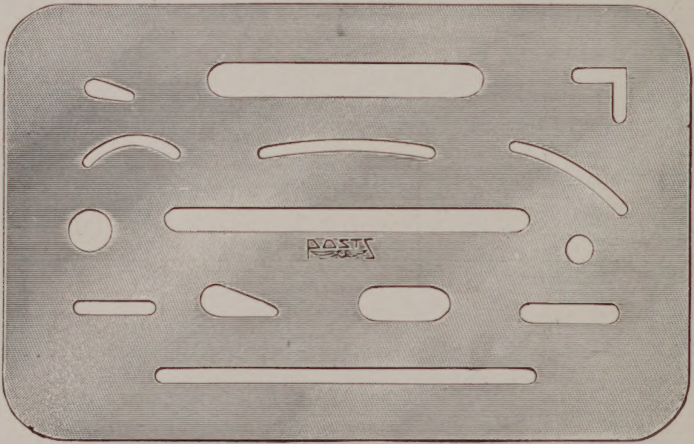
No. 2958. Dusting Brush, invisible wire-drawn, 8″ flat brush with 6″ handle ....Each

No. 2959. Dusting Brush, invisible wire-drawn, 10″ flat brush with 6″ handle ....

ERASING SHIELDS

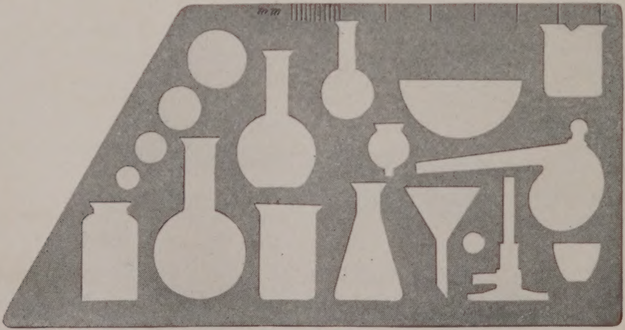


No. 2960. Metal Erasing Shield, nickel-plated, 2⅜x3¾ inches Each Doz.
2960½. Celluloid Shield, 2⅜x3¾ inches................



No. 2963

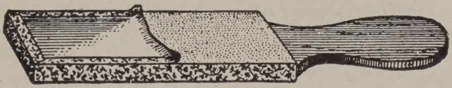
No. 2963. Metal Erasing Shield, 2⅜x3¾ inches..........Each, Doz.,



No. 2965

No. 2965. Celluloid Chemistry Stencil..................Each, Doz.,

PENCIL POINTERS



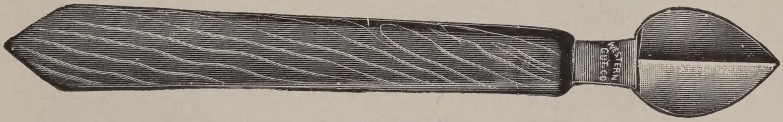
No. 3000

	Each	Dozen
No. 3000. Pencil Pointer, 1¼x4 inches, with handle.........		
3002. Pencil Pointer, 1¼x4 inches, without handle.......		

These pencil pointers consist of a number of sheets of flint paper made into a block.

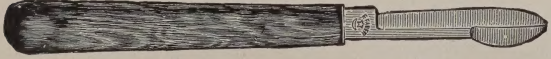
	Each	Dozen
No. 3003. Like No. 3000, but made of emery paper.........		

STEEL ERASERS



No. 3012

	Each	Dozen
No. 3012. Steel Eraser, cocoa handle......................		
3014. Steel Eraser, cocoa handle, fine finish............		
3016. Steel Eraser, white bone handle..................		

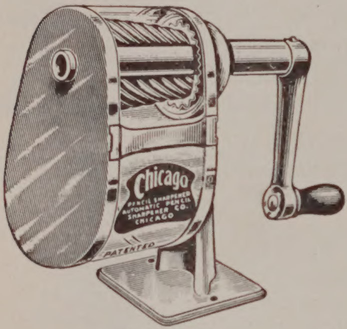


No. 3020

	Each	Dozen
No. 3020. Steel Eraser, cocoa handle.....................		
3021. Steel Eraser, ebony handle...................		
3023. Steel Eraser, white bone handle...............		

PENCIL SHARPENERS

The three Pencil Sharpeners listed below have been found to be the most serviceable and practical sharpeners on the market. The DEXTER and IDEAL Sharpeners can be furnished with special cutters for Draftsman's use, namely: DRAFTSMAN'S REGULAR, exposing long length of lead in original size, **not pointed,** and DRAFTSMAN'S SPECIAL, exposing long length of lead, **pointed at the end.**



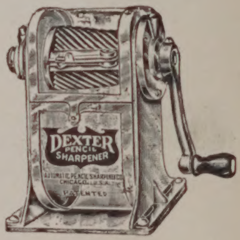
No. 3029

No. 3029. **CHICAGO PENCIL SHARPENER.** A moderate-priced, practical sharpener; points all sizes of pencils and crayons, ideal for general use. Automatically stops cutting when point is made. Shavings holder of celluloid, metal-trimmed, easily removed for unloading. Each . . . .

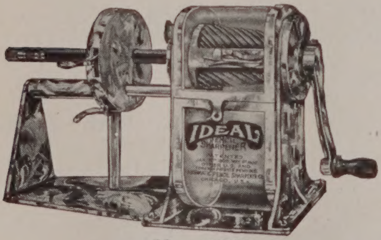
No. 3029A. **EXTRA CUTTERS.** Pair,

No. 3032. **DEXTER PENCIL SHARPENER.** Built to stand a lifetime of service; will sharpen every size pencil or crayon. Can be used in any position. Full nickel; shavings holder of celluloid; working parts automatically oiled. Stops cutting when desired point is produced. Sold with fastening clamps. Each . . . .

No. 3032A. **EXTRA CUTTERS.** Pair,



No. 3032



No. 3033

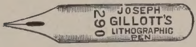
No. 3033. **IDEAL PENCIL SHARPENER.** High-grade sharpener with automatic pencil feed. Any size pencils or crayons economically sharpened. Full nickeled. Extremely durable. Popular for school use. Each,

No. 3033A. **EXTRA CUTTERS.** Pair,

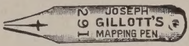
Please Specify If Draftsman's Cutters Are Desired.

STEEL PENS

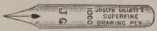
FOR DRAFTING USE


290
JOSEPH
GILLOTT'S
LITHOGRAPHIC
PEN

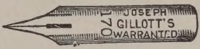
No. 3083


291
JOSEPH
GILLOTT'S
MAPPING PEN

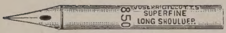
No. 3085


JG
1000
JOSEPH GILLOTT'S
SUPERFINE
DRAWING PEN

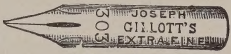
No. 3082


170
JOSEPH
GILLOTT'S
WARRANTED

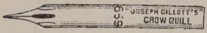
No. 3087


850
JOSEPH GILLOTT'S
SUPERFINE
LONG SHOULDER

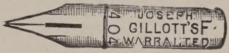
No. 3081


303
JOSEPH
GILLOTT'S
EXTRA FINE

No. 3088

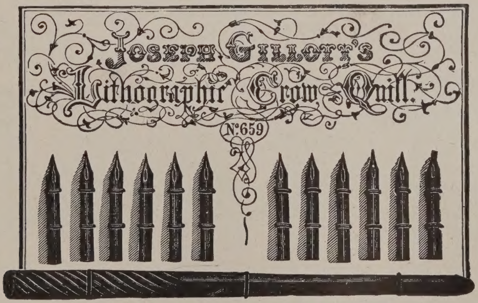

659
JOSEPH GILLOTT'S
CROW QUILL

No. 3091


404
JOSEPH
GILLOTT'S F
WARRANTED

No. 3089

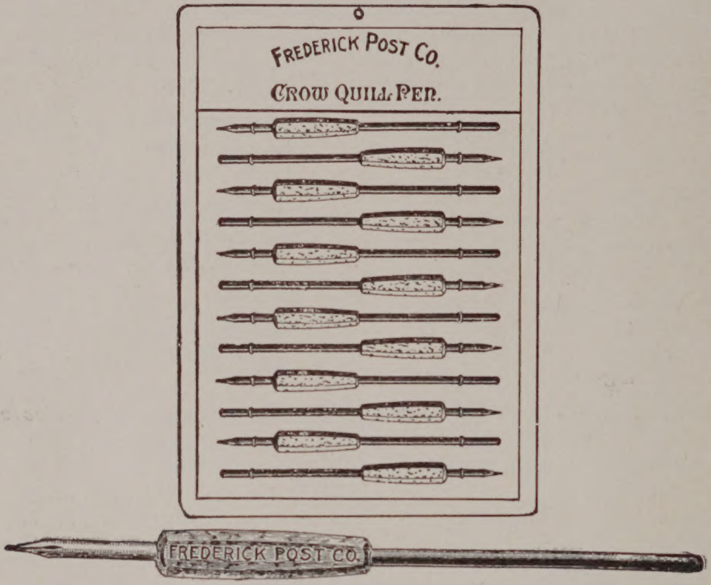
No.		Per Doz.	Per Gross.
No. 3081.	Gillott's Crow Quill Pens, (850) Long Shoulder, on cards	1,28	109
3082.	" Drawing " (1000) Superfine, on cards....	2,03	
3083.	" Lithographic" (290) on cards with holder...	90	
3084.	" " " (290) loose, in gross boxes...	67	
3085.	" Mapping " (291) on cards, with holder..	90	
3086.	" " " (291) loose, in gross boxes..	67	
3087.	" " " (170) " " " " ...	18	
3088.	" " " (303) " " " " ...	18	
3089.	" " " (404) " " " " ...	12	
3090.	French Crow Quill Pens, on cards, with holders......	54	


Joseph Gillott's
Lithographic Crow Quill.
No. 659

(About ⅝ Actual Size)
No. 3091

No.		Per Doz.	Per Gross.
No. 3091.	Gillott's Crow Quill Pens (659), on card with holder..	90	
3091A.	" " " " (659), in ¼-gross boxes....	67	
3092.	Hunt's " " " (102), on card; 12 holders..	81	

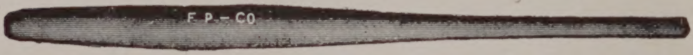
DRAWING PENS


FREDERICK POST Co.
CROW QUILL PEN.
FREDERICK POST CO.

No. 3094

No. 3094. Post's Crow Quill Pens, with improved holder with cork finger piece, card of 12 pens........................Per Card, To dea

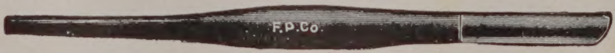
PENHOLDERS



No. 3095

Per Dozen

No. 3095. Improved Crow Quill Penholder, without pen........
A holder for Crow Quill Pens of the thickness of an ordinary penholder.



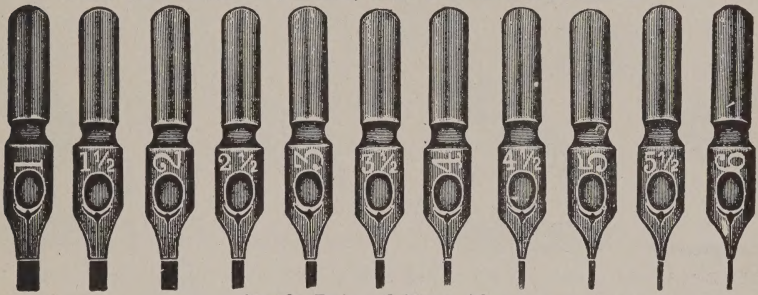
No. 3096

Per Dozen

No. 3096. Penholder, polished handle........................
3097. " cork grip ....
3098. " for Crow Quill Pens, wood..............
3099. " " " " " ebony.............

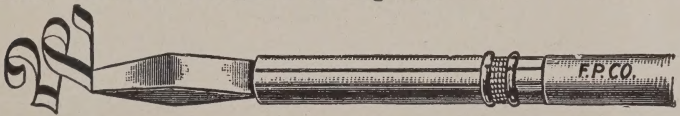
Round Writing Pens

FOR LETTERING PLANS, MAPS AND DRAWINGS



Single Pointed Pens, Nos.

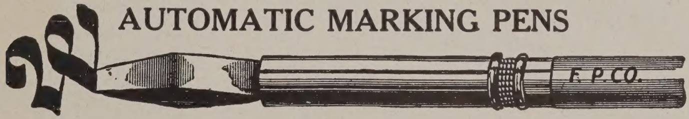
No. 3107. Single Pointed Pens..........Per ¼ gross of any one size,
3108. " " " ....Per gross of any one size,
3109. Assortment of 12 Single Pointed Pens, on card....Per card, 23.
3111D. Penholder for Round Writing Pens....................Each,



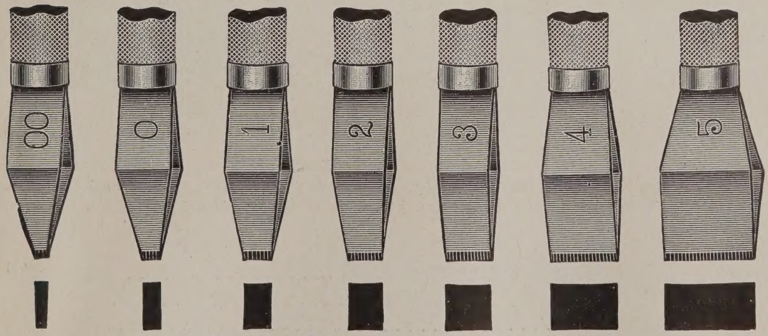
No. 3112

No. 3112. Automatic Shading Pens,	0	1	2	3	4	5	
Width of nib..........	$\frac{1}{16}$	⅛	$\frac{3}{16}$	¼	⅜	½	inch..Each, Doz.,

AUTOMATIC MARKING PENS



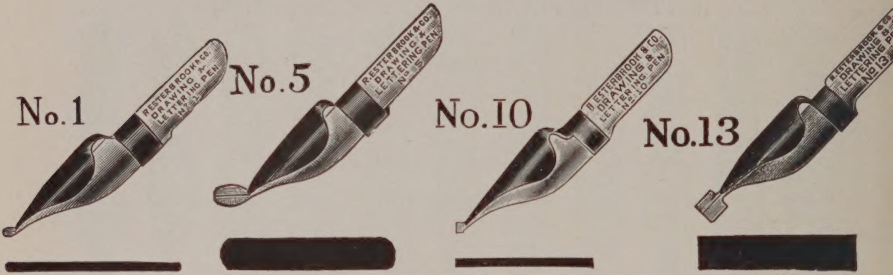
No. 3113



No. 3113. Automatic Marking Pens,	00	0	1	2	3	4	5	
Width of nib..........	$\frac{1}{16}$	$\frac{3}{32}$	⅛	$\frac{3}{16}$	¼	⅜	½ in.	Each, Doz.,

LETTERING PENS

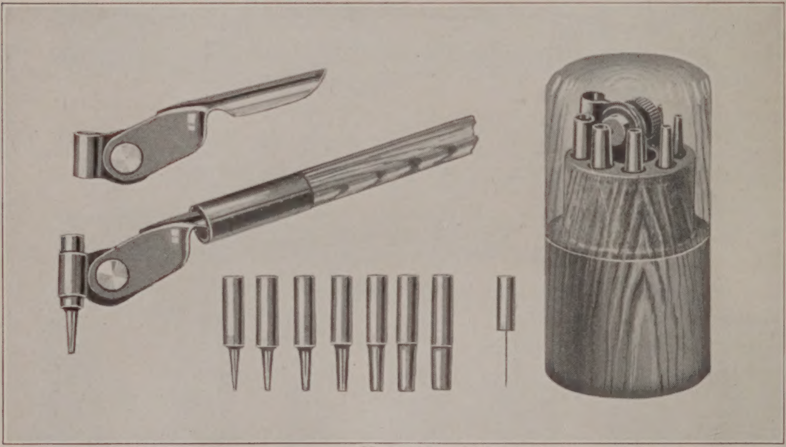
Esterbrooke's Drawing and Lettering Pens



The Esterbrooke Drawing and Lettering Pens are the fastest lettering pens made. Two styles and four sizes in each style. Packed one dozen to the box; all of one style or assorted.

No. 3120. Esterbrooke Drawlet Pens, from No. 1 to 17............Dozen, ~~.94~~ Gross,

PRIMO TUBE PENS



No. 3130

In many years of service to draftsmen, showcard writers, commercial artists or merchants, we have never sponsored a lettering pen with as many advantages and as few faults as the Primo.

No. 3130. Primo Lettering Outfit, 6 Pens...................Per set, 1.07
3132. Primo Lettering Outfit, 8 Pens...................
3135. Socket ....Each,
3136. Pen and Cleaner ....

WRICO LETTERING GUIDES AND PENS

WRICO LETTERING GUIDES are made in two principal styles—with cut-outs for **VERTICAL LETTERING** and for **SLANTING LETTERING.** Each guide is a strip of highly seasoned transparent pyrolin with a series of openings so shaped that when the point of a **WRICO LETTERING PEN** is moved in contact with the sides, the letters of the alphabet, numerals, etc., are formed. Full directions for use are furnished with every set.

INDIVIDUAL WRICO LETTERING GUIDES

Standard Vertical Guides	Standard Slant Guides	Condensed Vertical Guides
No. 3137—A. V.C.N.90	No. 3138—A. S.C.N.90	No. 3139—A. C.V.C.185
B. V.C.N.120	B. S.C.N.120	B. C.V.C.250
C. V.C.N.140	C. S.C.N.140	C. C.V.C.375
D. V.C.N.175	D. S.C.N.175	D. C.V.C.500
E. V.C.N.200	E. S.C.N.200	E. C.V.C.625
F. V.C. 240	F. S.C. 240	F. C.V.L.185
G. V.C. 290	G. S.C. 350	G. C.V.L.250
H. V.C. 350	H. S.C. 500	H. C.V.N.185
I. V.C. 425	I. S.N. 240	I. C.V.N.250
J. V.C. 500	J. S.N. 350	J. C.V.N.375
K. V.N. 240	K. S.N. 500	K. C.V.N.500
L. V.N. 290		L. C.V.N.625
M. V.N. 350		
N. V.N. 425		
O. V.N. 500		

No. 3140. Lettering Pens Nos. 2, 3, 4, 5, 6 and 7.................Each
No. 3141A. Needle-3141B. Point-3141C. Plunger-3141D.
Ferrule-3141E. Handle ....

EXPLANATION OF CATALOG NUMBERS OF LETTERING GUIDES

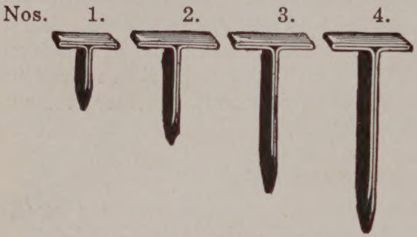
V.C.N.90	stands for	Vertical Capitals and Numerals........	Height	.090″
S.C.N.175	“ “	Slant Capitals and Numerals	“	.175″
V.C. 350	“ “	Vertical Capitals	“	.350″
S.N. 500	“ “	Slant Numerals	“	.500″
C.V.C.185	“ “	Condensed Vertical Capitals	“	.185″
C.V.L.250	“ “	Condensed Vertical Lower Case Letters	“	.250″
C.V.N.625	“ “	Condensed Vertical Numerals	“	.625″

WRICO GUIDE SETS

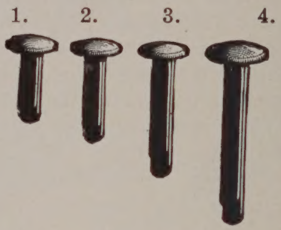
No. 3142.	Vertical Set No. M	—8 Guides and 5 Pens	Each
3142A.	Slant Set No. SM	—8 Guides and 5 Pens	
3143.	Vertical Set No. A	—7 Guides and 4 Pens	
3143A.	Slant Set No. SA	—7 Guides and 4 Pens	
3144.	Vertical Set No. B	—6 Guides and 3 Pens	
3144A.	Slant Set No. SB	—6 Guides and 3 Pens	
3145.	Vertical Set No. E	—3 Guides and 1 Pen	
3145A.	Slant Set No. SE	—3 Guides and 1 Pen	
3146.	Condensed Set No. F	—6 Guides and 4 Pens	
3147.	“ “ No. D	—6 Guides and 1 Pen	
3148.	Vertical Set No. KV	—2 Guides and 1 Pen	
3148A.	Slant Set No. KS	—2 Guides and 1 Pen	
3149.	Vertical and Slant Set No. KVS	—4 Guides and 1 Pen	

175
118
57

BRASS PAPER FASTENERS



No. 3150



No. 3155

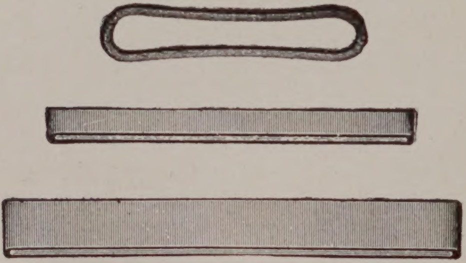
No. 3150. Paper Fasteners, flat heads.

Number	1	2	3	4	5	6
Length, inches	¼	½	¾	1	1¼	1½
Per box of 100						
" 1,000						

3155. Paper Fasteners, round heads.

Number	1	2	3	4	5	6
Length, inches	¼	½	¾	1	1¼	1½
Per box of 100						
" 1,000						

BEST RUBBER BANDS



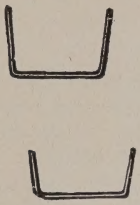
No. 3156

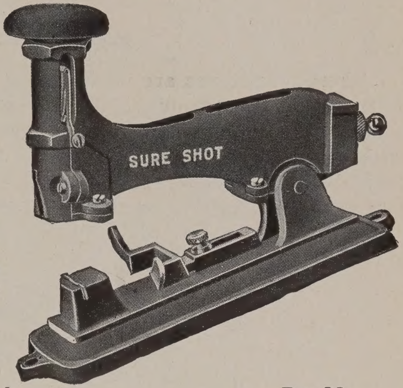
No. 3156. Rubber Bands.

Length	1	1¼	1½	2	2½	3	3½
Width, 1/16 in........Per Box of ¼ lb.							
" ⅛ " .... "							
" ¼ " .... "							

Rubber Bands, 1 box assorted sizes, No. 300..Per Box of ¼ lb.
" " 1 " " " " 400.. "

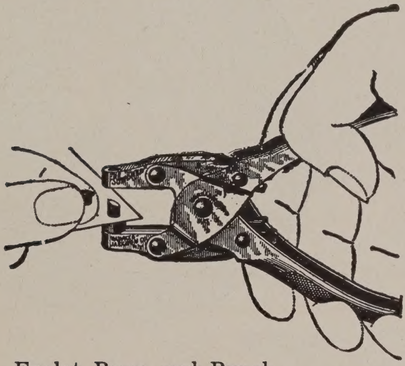
STAPLE AND EYELET PRESSES

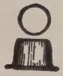




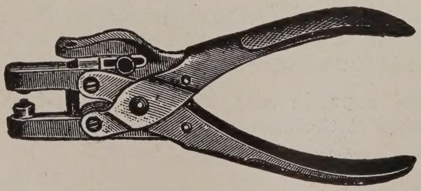
No. 3157. **STAPLING MACHINE.** A quite powerful stapling machine for fastening blue prints, etc., when thickness is not over ¼ inch. Anti-clogging device makes operation certain, and automatically reloads. Each,

3157A. Staples, ¼ inch, 5,000 in box....................Per M.,
3157B. Staples, 5/16 inch, 5,000 in box.................... "





No. 3158. Eyelet Press and Punch..........................Each,
3158A. Eyelets ....Per box of 250,



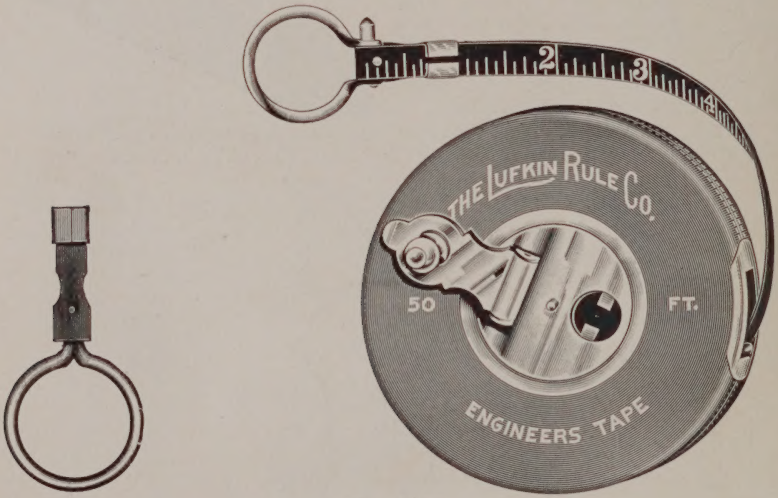
No. 3159. The "Standard" Eyelet Press and Punch, made of metal, nickel-plated, is greatly superior to any of its kind. The "gauge" is a new feature of great utility and all the obnoxious breakage of springs, etc., which continually occurs in other eyelet punches, is impossible in the "Standard." Each,

3159A. Eyelets ....Sizes B J. N. D. B. long D. B. short
Per box of 250..

STEEL MEASURING TAPES

ENGINEERS' PATTERN

These steel tapes are made of the best grade of steel obtainable for this purpose, uniform in quality and evenly tempered. They are superior to any other make in material, accuracy and workmanship. They are graduated with the utmost care as to accuracy in accordance with the U. S. Standard furnished by the National Bureau of Standards in Washington, D. C., and we can guarantee them to be as perfect in accuracy as they can be made.



No. 3200

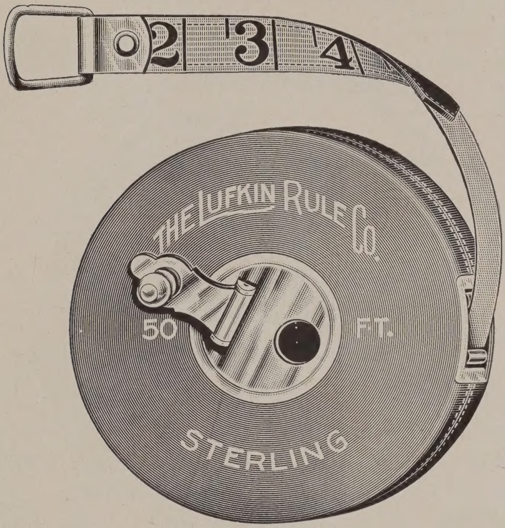
Engineers' Steel Tape, in hard leather steel-lined case, nickel-plated trimmings, with two detachable rings. The tape can be readily detached from the case and we furnish an extra ring for the other end. The steel is heavier and stronger than used in the regular steel tapes and the cases are thinner.

Engineers' Steel Tape, in case, steel ribbon ¼-inch wide, flush handle, graduation beginning at the end of the line.

	50 ft.	75 ft.	100 ft.
No. 3200. Divided in 10ths....................			
3201. " " 12ths....................			
Meters...	15	25	30
No. 3205. Divided in metric measurement.......			

"STERLING" LINEN MEASURING TAPES

(Trade Mark Registered)



No. 3310

The "Sterling" Linen Tapes are made of best grade interwoven Linen Thread, coated with a waterproof sizing to protect the surface and to prevent stretching. Hard leather cases, brass trimmings.

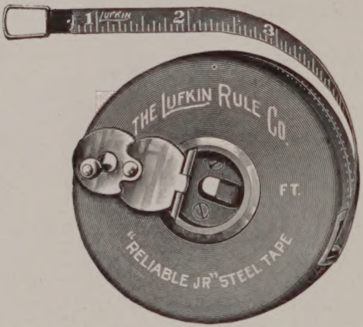
	Length in feet		25	50	75	100
No. 3310.	"Sterling" Tape, feet in 10ths. Each,					
3312.	"Sterling" Tape, feet in 12ths. "					
3318.	"Sterling" Tape, Metric. Each,	10	15	20	25	30

Tape Lines Only

	Feet		25	50	75	100
3319.	"Sterling" Tape, feet in 10ths. Each,					
3320.	"Sterling" Tape, feet in 12ths. "					
3322.	"Sterling" Tapes, Metric. Each,	10	15	20	25	30

STEEL MEASURING TAPES

THE "RELIABLE JUNIOR"



No. 3220

The "Reliable Junior" Steel Tape is an exact counterpart of the "Reliable," but only about one-half its size and weight. It is an excellent piece of workmanship, and, although small and light, the steel is of sufficient weight and it is constructed in such a careful manner that with proper care it will wear as long as an ordinary steel tape. Fully guaranteed as to accuracy and construction.

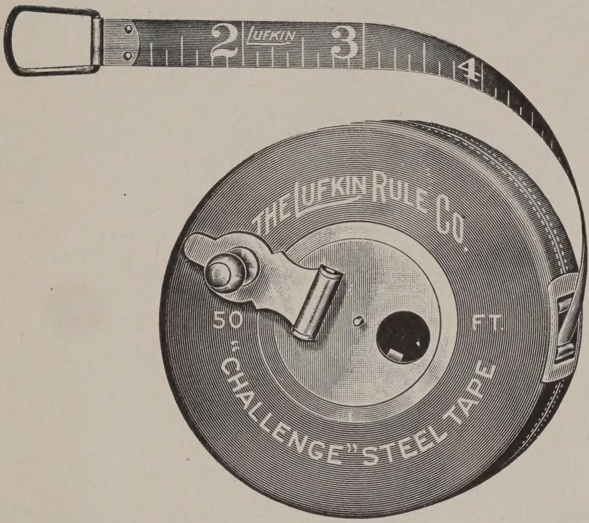
With flush folding handle, in genuine cordovan leather case, and with nickel-plated trimmings, with ¼-inch tape.

The "Reliable Junior" is a very convenient vest pocket tape, as the 25-foot tapes weigh only three ounces; the 50-foot tapes five ounces, complete, and longer tapes in proportion.

Length, in feet............................	25	50	100
No. 3220. Divided in 10ths and feet..............Each,			
3221. " " 12ths " .... "			
3222. " " metric measure, one side.... "	15M	25M	30

STEEL MEASURING TAPES

THE "CHALLENGE"



No. 3228

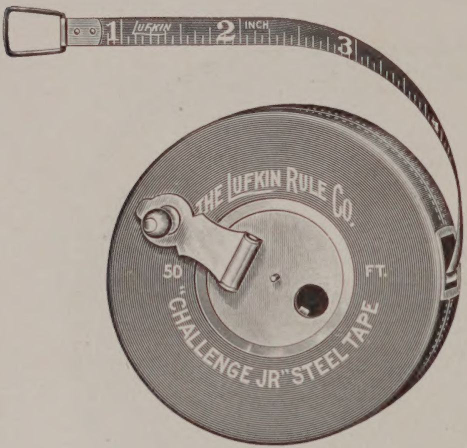
The "Challenge" Steel Tapes, although somewhat lower in price than other steel tapes, are of unusual merit. They are of perfect workmanship and absolutely accurate and can be safely relied on to give satisfaction in every particular.

"Challenge" Steel Measuring Tapes in hard leather cases, with flush handles and nickel-plated trimmings, ⅜-inch steel ribbon, divided on one side only.

	Length, in feet...........	25	33	50	66	75	100
	Diameter, in inches.......	2¾	2¾	3¼	3¾	4¼	4½
No. 3228.	Divided in 10ths and feet...Each,						
3228A.	" " 12ths " ... "						

	Length, in meters............	10	15	20	25	30
No. 3229.	Divided in metric measure, first 10 centimeters in millimeters..Each,					

STEEL MEASURING TAPES



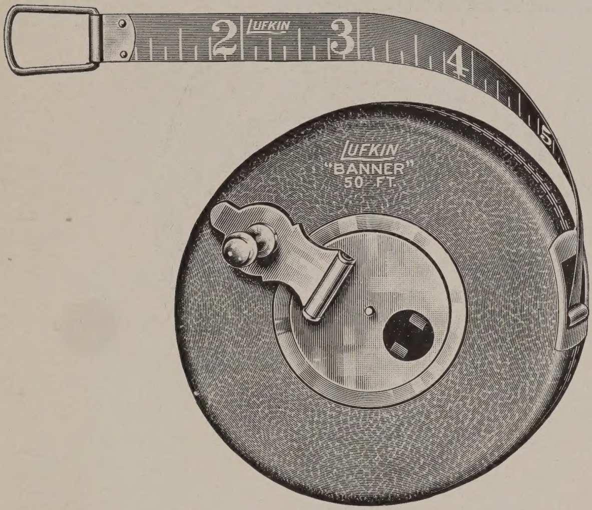
No. 3230

The "Challenge Junior" Steel Tape compares with the "Challenge" as the "Reliable" with the "Reliable Junior." It is a smaller and lighter tape of the same type. While very light and compact, yet it is constructed in a very durable manner. The measurements are guaranteed to be perfectly accurate. The 25-foot tape weighs only three ounces and the 50-foot tape only five ounces, complete, and it will prove specially attractive to those who desire a tape for light work, which can conveniently be carried in the pocket.

"Challenge Junior" Tapes, in genuine Russet leather cases, with flush handles, nickel-plated trimmings, divided one side only, with ¼-inch tape.

	Diameter, in inches........................	2¼	2⅜	3⅜
	Length, in feet.............................	25	50	100
No. 3230.	Divided in 10ths and feet..............Each,			
3231.	" " 12ths " " .... "			
3233.	" " metric, one side; feet, other... "			

STEEL MEASURING TAPES



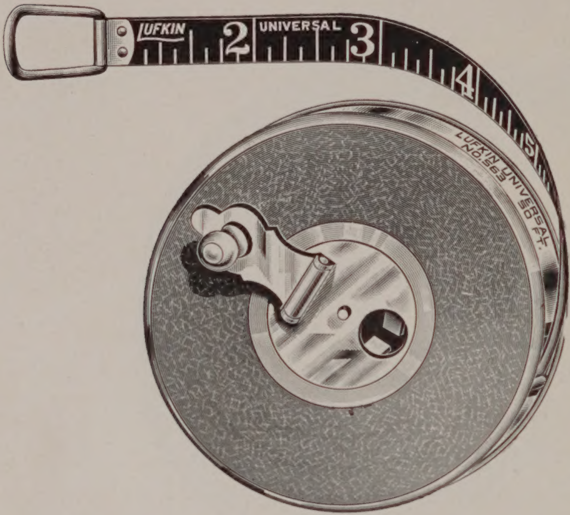
No. 3235

Black leather cases, folding flush handle, opened by pressing pin on opposite side. Measurements guaranteed accurate. Ribbon ⅜-inch wide. An excellent, popular-priced tape.

Length, in feet........................	25	50	75	100
No. 3235. Feet in 12ths ....Each,				

Length, in meters......................	10	15	20	25
No. 3236. Metric ....Each,				

STEEL MEASURING TAPES



No. 3237

A STEEL TAPE SO LOW IN PRICE THAT NO CARPENTER OR OTHER MECHANIC CAN AFFORD TO BE WITHOUT IT

The "Universal" Gives the Accuracy Obtainable Only in a Steel Tape, at a Price Approaching That of Woven Lines

A ⅜-inch wide, standard weight, Steel Tape, clearly marked. The metal-lined case of mottled, tan-colored, imitation leather, a material having excellent wearing qualities and good appearance. Folding flush handle is opened by pressing pin on opposite side. Case edge-band and all trimmings are nickel-plated. Measurements guaranteed accurate.

WITH THREE-EIGHTHS INCH STEEL TAPES

Marked Feet, Inches and 8ths of Inches, One Side Only

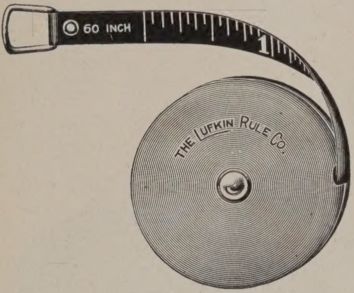
	Length, in feet	25	50	75	100
No. 3237.	Feet, in inches and 8ths				

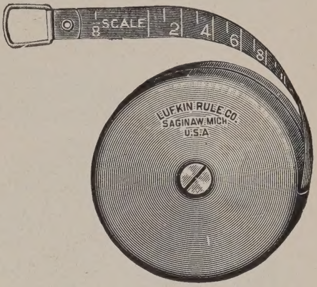
Packing: One in a box.

Note: "Universal" Steel Tapes are not furnished marked feet, 10ths and 100ths of feet.

STANDARD STEEL AND LINEN MEASURING TAPES

POCKET SIZE




SCALE
LUFKIN RULE CO.
SAGINAW MICH
U.S.A.

Nickel-Plated Cases, Spring Wind, with Center Stop

Tapes ¼-in. Wide, Inches and 16ths One Side, Architects' Scale on the Other

No. 3238. 60 inches, with ⅛ inch scale marked and numbered from one to 480.......................................Each,

No. 3238A. 60 inches, with ¼ inch scale marked and numbered from one to to 240.......................................Each,

Tapes ¼-in. Wide, Marked Inches and 16ths One Side, Millimeters Other Side

No. 3239. 36 inches, 1 meter ....Each,
3239A. 60 inches, 1½ meters...........................
3239B. 72 inches, 2 meters...........................
3239C. 96 inches, 2½ meters...........................

Tapes ¼-in., Marked One Side Only, 10ths and 16ths

No. 3240. 36 inches ....Each,
3240A. 60 inches ....
3240B. 72 inches ....
3240C. 96 inches ....

Tapes ¼-in., Marked One Side Only, Inches and 16ths

No. 3241. 36 inches ....Each,
3241A. 60 inches ....
3241B. 72 inches ....
3241C. 96 inches ....
3242. 5/16ths Tape with Diameter Measurements, consecutive inches and 16ths one side; other, diameter inches; 12 feet long. Each,

5/16-in. Tape Marked Feet, Inches and 16ths One Side, Feet, 10ths and 100ths, Other Side

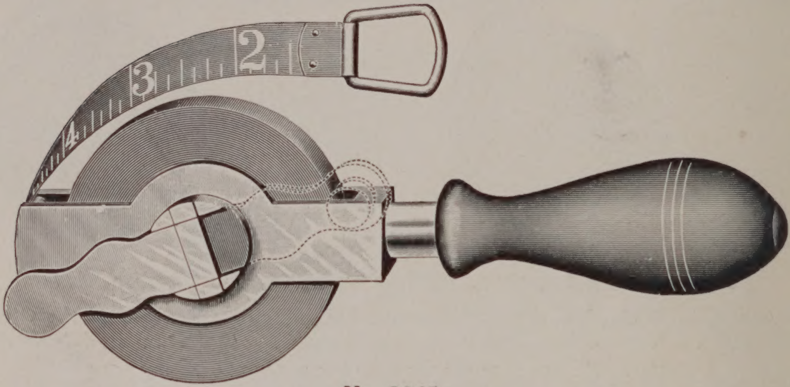
No. 3243. 10 feet ....Each,
3243A. 12 feet ....

ONE-QUARTER INCH POCKET ENAMELED LINEN TAPES, SPRING WIND CENTER STOP

Marked Inches and 8ths One Side Only

No. 3244. 36 inches ....Each,
3244A. 60 inches ....
3244B. 72 inches ....

LOCK HANDLE FRAME STEEL TAPES



No. 3245

These frames are the same as our Engineers' and regular pattern Frame tapes, except in the winding apparatus. This consists of the regular frame, but is fitted with a folding lock handle, which folds over the tape, enabling one to stop it at any desired length. This handle, on account of its length, also affords increased winding leverage, which, together with the large knob, make it especially convenient and easy winding.

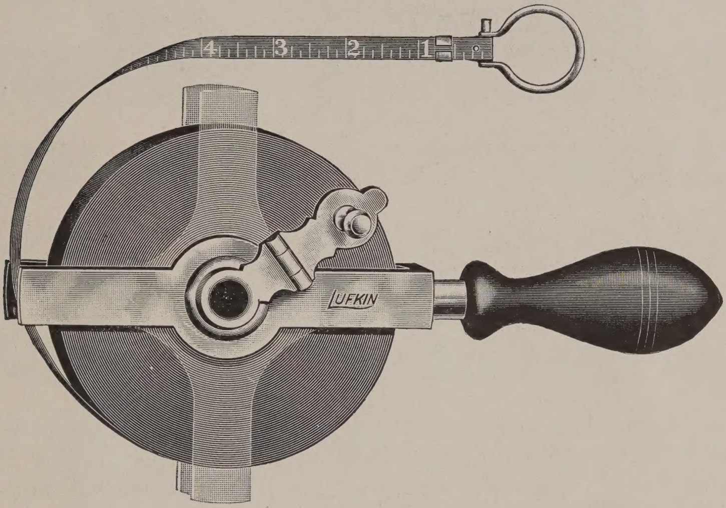
With One-Half Inch Engineers' Pattern Tapes, Detachable Rings

	Length, in feet..................	33	50	66	75	100
No. 3245.	Divided in 10ths and 100ths...Each,					
3246.	Divided in 12ths and 8ths.....					

All the above Tapes are furnished with two arm frames, except 100 feet, which have four arm frames.

STEEL MEASURING TAPES

ENGINEERS' PATTERN



No. 3250

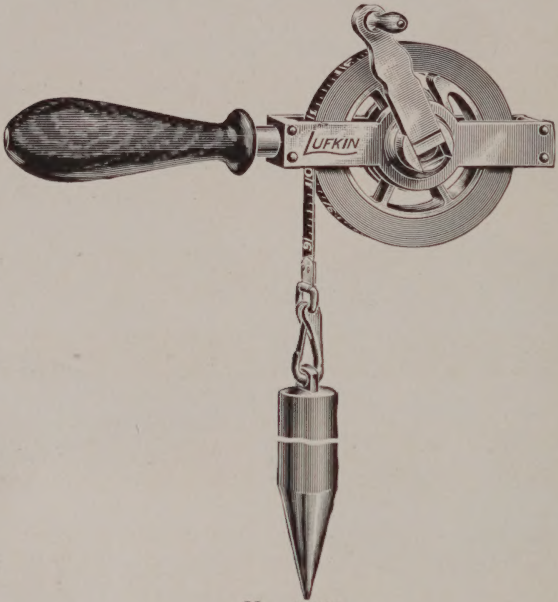
Four-Arm Frames for 100 Feet and Longer Tapes

Engineers' Pattern Frame Steel Tapes, with two detachable rings and folding, winding handles. Frames and trimmings nicely nickel-plated. With strong one-quarter inch steel ribbon. The tape can be readily detached from the frame and an extra ring is furnished for the other end of the tape.

	Length, in feet............	33	50	66	75	100	200
No. 3250.	Divided in 10ths........Each,						
3251.	Divided in 12ths........Each,						

	Lengths in meters...............	10	15	20	25	30
3254.	Divided in metric measure, first decimeter in millimeters, balance of length in centimeters ....Each,					

STEEL MEASURING TAPES



No. 3260

"ATLAS" OIL GAUGERS' HEAVY STEEL TAPES

With Plumb Bob **With Lock Handle**

Instantaneous Readings **"Nubian" Finish**

Extra Heavy Lock Handle Frame Tape with No. 590, 18-oz. Plumb Bob Designed Exclusively for Tank Gauging.

This tape is well balanced and the most practical and durable one made for tank gauging.

One-half inch wide steel line, 50 per cent heavier than standard ½-inch measuring tapes, and distinctly marked. Measurements guaranteed accurate. Metal frame also is built to stand severe wear and tear. It is heavily nickel-plated and has polished hardwood handle. It has lock handle, which, turned over, engages the frame and holds or locks the tape at any point. Long winding handle and knob, and extra size drum shell gives good grip, leverage and speed in winding.

The nickel-plated bob is round with tapered point, is 6¾ inches long and one inch in diameter. Weighing 18 ozs., it will penetrate the heavier oils. It is included in measurement of tape and can be detached.

WITH HEAVY, ONE-HALF INCH TAPES

STANDARD PATTERN

Marked Feet, Inches and 8ths of Inches, One Side Only

No. 3260. With 3273 Plumb Bob. Length 33 feet. Weight each, 2¾ lbs. Each,
3261. With 3273 Plumb Bob. Length 50 feet. Weight each, 3¼ lbs. Each,

Marked Metric and English

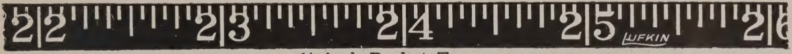
One side metric (first decimeter in mm., balance of length in cm.)
One side English (feet, inches and 8ths of inches)

No. 3262. With 3273 Plumb Bob. Length 10 meters (33 ft.). Weight each, 2¾ pounds. .... Each,
3264. With 3273 Plumb Bob. Length 15 meters (50 ft.). Weight each, 3¼ pounds. .... Each,

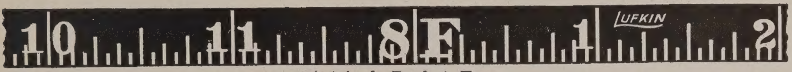
STEEL MEASURING TAPES

Steel Tapes Shown in Actual Widths

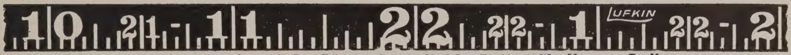
The following illustrations show our steel tapes in their actual widths. They show also the standard English graduation of the several tapes.



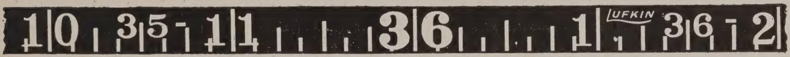
¼-inch Pocket Tapes



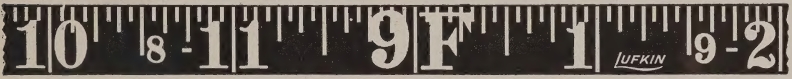
5/16-inch Pocket Tape



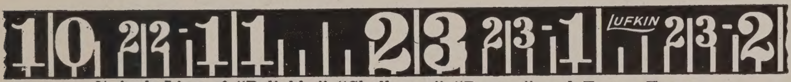
¼-inch Lightweight Line of "Reliable Jr.", "Challenge Jr."



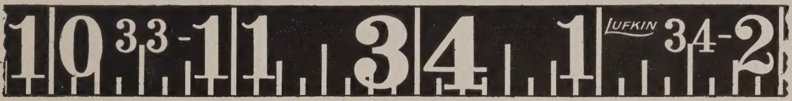
¼-inch Heavy Line of Series: Engineers' Patterns



⅜-inch Line

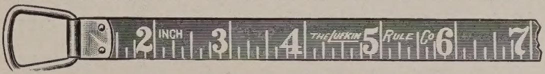


⅜-inch Line of "Reliable," "Challenge," "Banner" and Frame Tapes

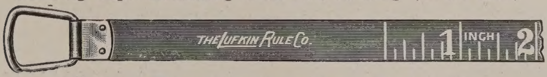


½-inch Line of "Reliable," "Challenge" and Frame Tapes

POINT OF BEGINNING OF MEASUREMENT ON STEEL TAPES



Showing Tape Measuring from End of Ring (Outer End)



Showing Tape with Blank Space (First End)

Our Standard Practice on Steel Tapes Is as Follows:

All catalogued long steel tapes marked one side only, measure from end of ring, except:

1. Engineers' Pattern Tapes (which measure from end of tape).
2. Chain Tapes (which have blank space first end).
3. Plumb Bob Tapes (which measure from lower end of bob).

All catalogued long steel tapes marked both sides have blank space first end, except:

1. Standard Pattern Tapes marked links on back (which measure from end of ring).
2. Engineers' Pattern Tapes (which measure from end of tape).
3. Plumb Bob Tapes (which measure from lower end of bob).

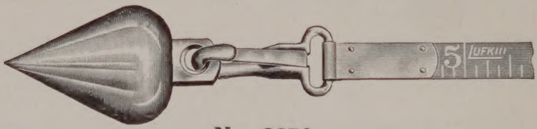
All catalogued Pocket Steel Tapes and "Artisan" Tapes, marked one or both sides, have blank space first end, except:

1. Millmen's Tapes (which measure from inside of hook).

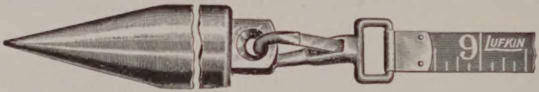
Note: While the above is our standard practice, any of our steel tapes (except pocket tapes) will, without extra charge, be furnished in either style.

TAPE ACCESSORIES

PLUMB BOBS FOR STEEL TAPES



No. 3270



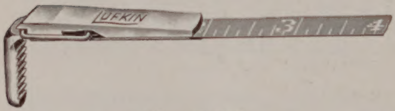
No. 3273

These plumb bobs, attached to steel tapes, are used in tank gauging throughout the oil industry. No. 3270 is of weight suitable for gauging the lighter crude oils, gasoline, etc. No. 3273 will penetrate the heavier oils. These two bobs are nickel-plated and polished.

No. 3270. Weight each, 6 oz. Length, 2⅜ in. Diameter, 1¼ in. Each,
3273. Weight each, 18 oz. Length, 6¾ in. Diameter, 1 in. "

Packing: One in a Box.

TAPE HOOKS

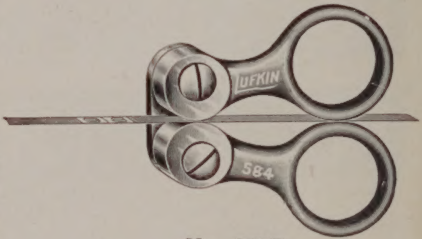


No. 3274

In many places enable one man to take long or short measurements unassisted. Easily slipped on our steel tapes with standard end rings. When attached to such tapes measuring from end of ring, zero falls at inside of hook.

No.	For	Wt. per Doz.	Price Each,
No. 3274.	¼″ tapes,	8 ozs.	
3275.	⅜″ tapes,	11 ozs.	
3276.	½″ tapes,	22 ozs.	

CLAMP HANDLES

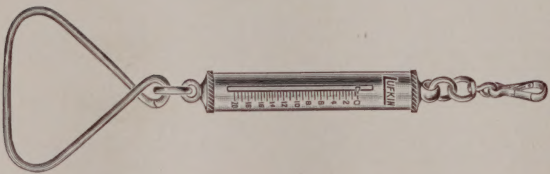


No. 3277

For attaching to any part of a long steel tape, thus enabling one to adapt it to any desired length. Brass, nicely nickel-plated.

No. 3277 . . . . .Each,

TENSION HANDLES

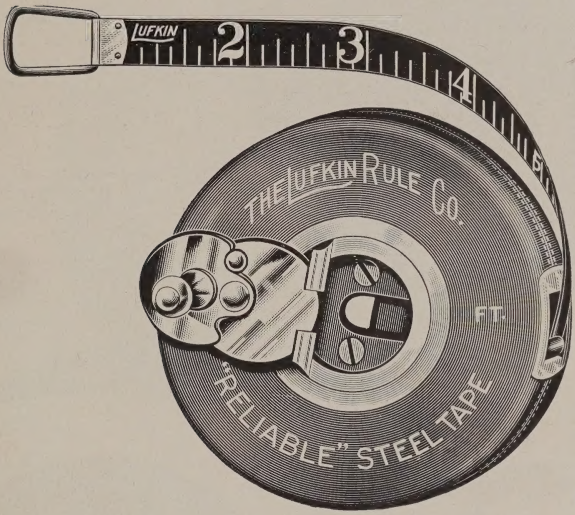


For applying the exact tension at which a steel tape is standard. Brass, nickel-plated.

No. 3278. Indicating tension up to 20 pounds by half pounds.
. . . .Each,

STEEL MEASURING TAPES

"RELIABLE"


LUFKIN
2
3
4
5
THE LUFKIN RULE CO.
FT.
"RELIABLE" STEEL TAPE

No. 3210

"Reliable" Steel Tapes in genuine cordovan leather cases, with double folding flush handles opened by pressing on opposite side, nickel-plated trimmings, measurements guaranteed to be accurate, ⅜-inch steel ribbon. Graduations begin at end of line.

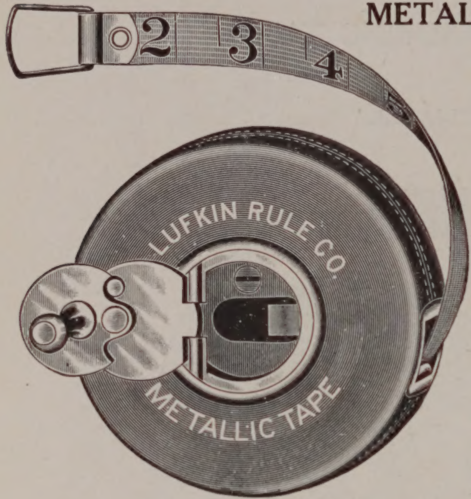
Length, in feet............	25	33	50	66	75	100
Diameter, in inches.........	2¾	2¾	3¼	3¾	4¼	4½

No. 3210. Divided in 10ths..........Each,

3211. " " 12ths.......... "

3212. " " 12ths and
metric measure........ "

METALLIC MEASURING TAPES



No. 3330

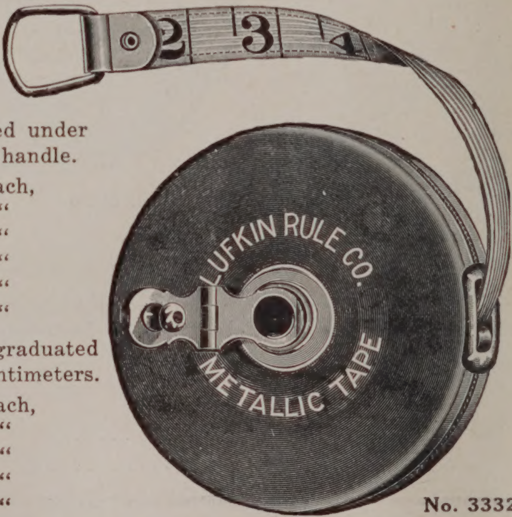
Tape of best woven shrunk linen, ⅝-inch wide, with metal warp, hard leather case, double folding flush handle, metal trimmings, graduated in 10ths or 12ths.

No. 3330.

25	feet............	Each,
33	"	"
50	"	"
66	"	"
75	"	"
100	"	"

No. 3331. Same as No. 3330, graduated in meters and centimeters.

10	meters..........	Each,
15	"	"
20	"	"
25	"	"
30	"	"



No. 3332

No. 3332. Same as described under 3330, with plain handle.

25	feet..............	Each,
33	"	"
50	"	"
66	"	"
75	"	"
100	"	"

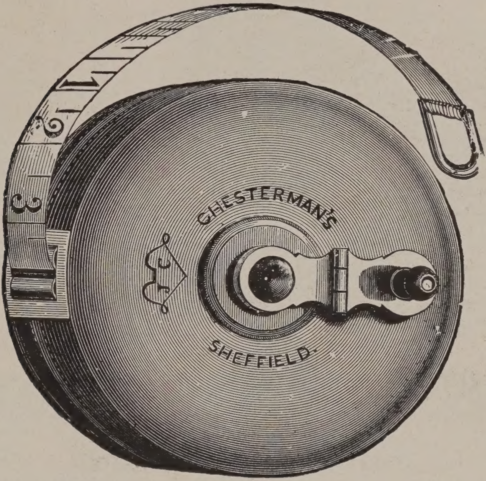
No. 3333. Same as 3332, graduated in meters and centimeters.

10	meters............	Each,
15	"	"
20	"	"
25	"	"
30	"	"

METALLIC TAPES WITHOUT CASES

	Length, feet................	25	33	50	66	75	100
No. 3340.	Marked one side........Each,						
3341.	" both sides...... "						
3342.	Length, meters........ "		10	15	20	25	30

CHESTERMAN'S MEASURING TAPES



No. 3345

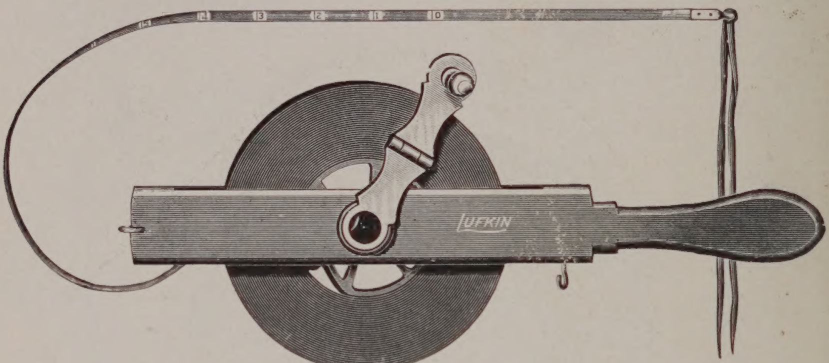
Chesterman's Metallic Tapes, Red Leather Case, ⅝-inch wide, wire woven or metallic, folding handle. Graduations begin at end of ring.

Feet,	25	50	70	100
No. 3345. Divided 10ths of feet and links...Each,				
3346. " 12ths " " ... "				

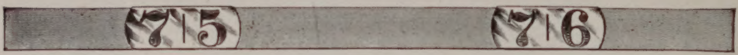
Chesterman's Metallic Tapes, without case.

Feet,	25	50	75	100
No. 3347. Divided 10ths of feet and links...Each,				
3348. " 12ths " " ... "				

IMPROVED SURVEYORS' CHAIN TAPES



No. 3360



SURVEYORS' CHAIN TAPES

Etched Graduations **"Nubian" Finish**

A Chain Tape for Heavy Survey Work, Yet One That Affords Also the Closest Degree of Accuracy

A quarter-inch, extra heavy steel tape, marked one side only. Markings are etched into raised bright portions of the tape, therefore are most legible and permanent. A pair of rawhide thongs is furnished with each tape (detachable rings instead, if specified). Put up on well-finished hardwood reel, with long, folding, winding handle and large drum. Trimmings nickel-plated. Line detachable from reel. Measurements guaranteed accurate.

Regular Markings

Tapes in feet—marked feet only every foot, with end feet in 100ths.
Tapes in links—marked links and poles, with end links in 10ths.
Tapes in meters—marked first and last decimeter in mm., balance of first and last meter in cm., balance of length in decimeters.

Packing: One in a Box

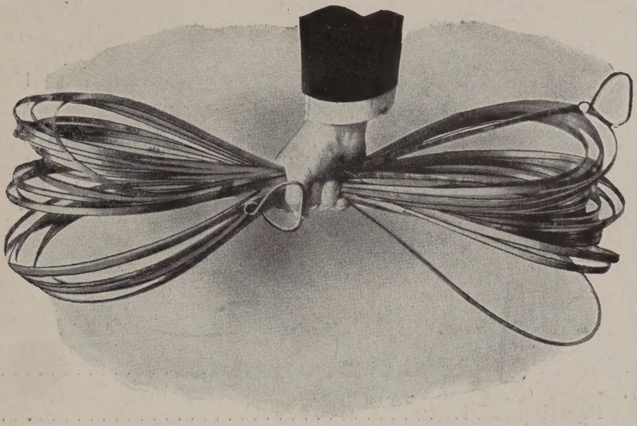
Note—Half-gauge mark put on any above tapes when specified. No extra charge. This is a mark 2′ 4¼″ from zero, representing one-half standard gauge of railroad track.

Tapes with end feet marked inches and 8ths, no extra charge.

Tapes with extra foot first end to 100ths numbered from right to left, no extra charge.

		Feet: 100	200	300
No. 3360.	Improved Surveyors' Chain Tapes, complete. .... Each,			
3361.	Tape only, with two rawhide thongs. . Each,			
3362.	Plain Reel only. . . . . "			
3363.	Rawhide Thongs . . . . Per Pair,			

CHICAGO STEEL TAPES



The Original BABBIT TAPE

Graduation beginning at end of Steel Ribbon	Graduation beginning 6 in. from end of Steel Ribbon	Length	Without Reel	With Wooden Reel	With Metallic Reel
			Each	Each	Each
3365	3365A	50 feet			
3366	3366A	100 feet			
3367	3367A	200 feet			
3368	3368A	300 feet			
3369	3369A	500 feet			
3370	3370A	100 link			
3371	3371A	200 link			
3372	3372A	20 vara			
3373	3373A	40 vara			
3374	3374A	50 vara			
3375	3375A	20 meter			
3376	3376A	40 meter			

For other lengths ask for special prices.

Extra handles, Rawhide or Metal, per pair,

For tapes with shoulders add .... without reel.

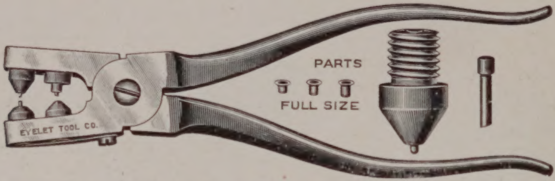
For tapes marked both sides add cents per mark.

For tapes marked on brass sleeves soldered to tape add cents per mark.

Set of Steel Numbers for re-stamping tapes....................

Our standard width is 5/16 inch, but ⅛, 3/16, ¼, ⅜ or ½-inch wide tape furnished if specified, at the same price as above, but not guaranteed.

TAPE REPAIR OUTFITS



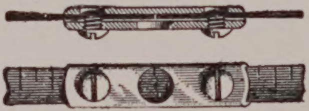
No. 3380

The "Punch and Riveter" Set for Repairing Steel Tapes. Five Minutes Only Required to Mend an Ordinary Break

Can be carried in instrument box, thus enabling an engineering corps to repair their broken tapes in the field with the loss of a few minutes' time. Cuts a clean hole through two thicknesses of steel tape without drawing the temper. No filing required; holes can be cut near the extreme edge without splitting the tape, thus avoiding any chance of dirt collecting under the splice, cutting the fingers when drawing tape through the hands, or catching in rags when cleaning, etc.

No. 3380. Punch and Riveter Outfit, complete....................

3381. Extra eyelets for outfit furnished 1,000 in package, two lengths. Per thousand..

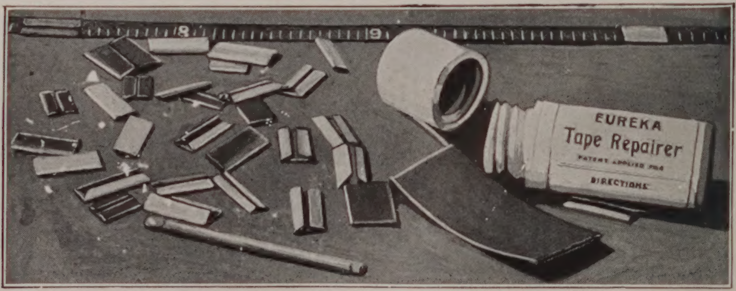


No. 3382

No. 3382. Little Giant Tape Splice, for ⅛, ¼, ⅜, ½-inch Tapes...............Each,

To repair breaks, insert broken ends, adjust by sight hole and turn down screws. Will not catch on obstructions and will withstand the strongest pull.

In ordering, please mention size wanted.



No. 3383

No. 3383. "Eureka" Tape Splice...............................Per Dozen Sleeves,

This splice consists of a thin sheet of metal folded in the shape of a sleeve and coated with a combination of solder and flux so sensitive, that the head of a common lighted match will bring about a perfect adhesion between tape and sleeve. The repair can be made in the field in a minute and look as neat as if done by a jeweler, and as strong as a blacksmith could do it. No rivets or soldering irons required.

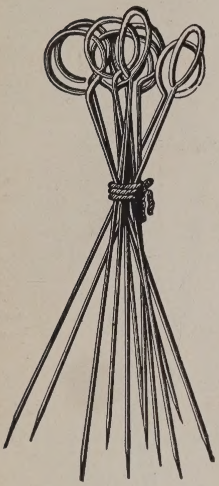
Sleeves are furnished one dozen in a small wooden box with directions.

Sleeves 1 inch long for heavy field tapes.

Sleeves ½ inch long for light packet tapes.

In ordering, state width of tape and whether heavy or light.

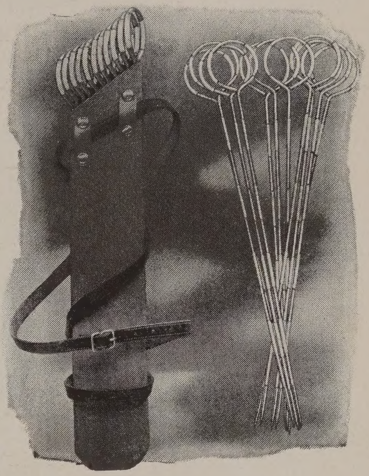
MARKING PINS OR ARROWS



No. 3385

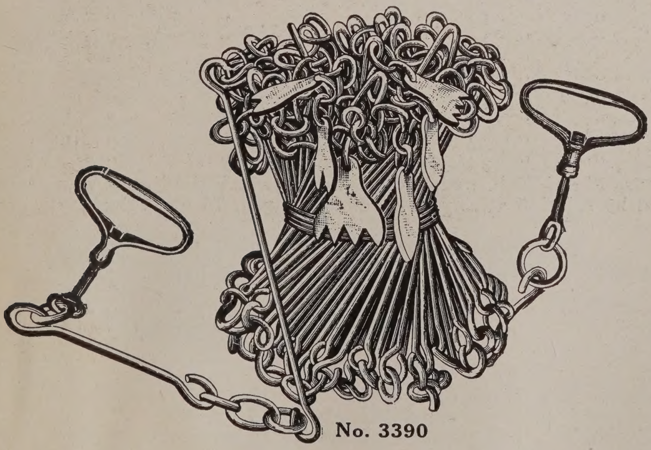
No. 3387

Are made of the best quality of hardened steel three sixteenths of an inch round wire and 6, 14 and 18 inches long. They are japanned red and white, alternating each inch. They much more quickly catch the eye in brush or grass when painted this way.



No. 3387

		Per Set
No. 3385.	Steel Arrows, W. G. 6, 11 in set, 14 inches long...	
3386.	Steel Arrows, W. G. 9, 11 in set, 9 in. long....	
3387.	Set of Eleven Pins, 14 inch, without Quiver.......	
3388.	Set of Eleven Railroad Pins, 6 inch, without Quiver	
3389A.	Quiver made of Cloth-Covered Pasteboard........	
3389B.	Quiver made of Light Sole Leather.............	
3389C.	Quiver made of Light Sole Leather for R. R. Pins..	



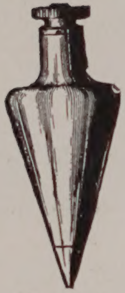
No. 3390

STEEL CHAINS

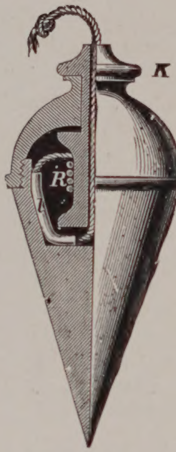
No. 3390. Surveyors' Steel Chains, brazed links and rings, W. G. 12, brass handles.
Feet: 33, 50, 66, 100.......Each,

No. 3391. Steel Metric Chains, brazed links and rings, W. G. 12, with brass handles.
Meters: 10, 15, 20, 25........Each,

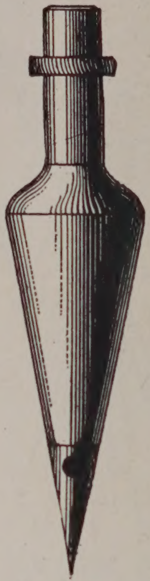
PLUMB BOBS



No. 3421.



No. 3420.



No. 3408.

LONG-NECK PLUMB BOBS

Lathe turned, Brass Plumb Bobs with interchangeable steel points and screw caps.

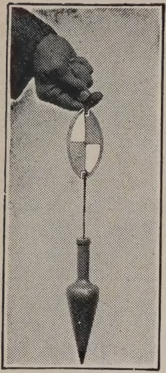
No. 3408.	Chicago Plumb Bob,	2 ounces..........	Each,	Dozen,
3409.	" " "	4 "	"	"
3410.	" " "	6 "	"	"
3411.	" " "	8 "	"	"
3412.	" " "	10 "	"	"
3413.	" " "	12 "	"	"
3414.	" " "	14 "	"	"
3415.	" " "	16 "	"	"
3416.	" " "	18 "	"	"
3417.	" " "	20 "	"	"
3418.	" " "	22 "	"	"
3419.	" " "	24 "	"	"
3420.	Fine Brass Plumb Bob, with reel inside, on which the line is wound and held by friction at any point of its length, 10-oz...		Each,	

MERCURY PLUMB BOBS

No. 3421.	"Mercury" Plumb Bob,	3½ ounces,	4 inches long..	Each,
3422.	" " "	6 "	4½ " " ..	"
3423.	" " "	12 "	5⅜ " " ..	"
3424.	" " "	16 "	6 " " ..	"

IRON PLUMB BOBS

No. 3438A.	Iron Plumb Bob, black enameled, about 7 ounces.	Each,
3438B.	Iron Plumb Bob, black enameled, about 10 ounces.	"
3438C.	Iron Plumb Bob, black enameled, about 14 ounces.	"



PLUMB BOB STRING TARGET

(Patented)

Made of light metal, 4 inches long, diameter, and 2 short; weighs about one ounce and fits into a vest pocket. When attached, string should be back of the main body of the target, through slots to front of the target, and seated in notches in the bead, which are in line with division on face of the target.

If held so that finger touches top of target (see illustration), rotation is prevented and the weight of the plumb bob prevents oscillation. Indispensable for mine and tunnel work.

No. 3426. Plumb Bob String Target (target only) . . . . Each,

Steel Points for Brass Plumb Bobs

No. 3428. Extra Steel Points, for Brass Plumb Bobs Nos. 3408 to 3419. Each . . . .

When Ordering, Give Catalog Number of Plumb Bob for Which the Steel Point Is to Be Used.

LEATHER SHEATHS FOR PLUMB BOBS

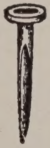
No. 3429A. 6 to 10 oz. No. 3429B. 12 to 16 oz. No. 3429C. 18 to 24 oz.

STAKE TACKS

Galvanized

No. 3430. Per 2 oz. Box. . .

3431. Per Pound . . . . .

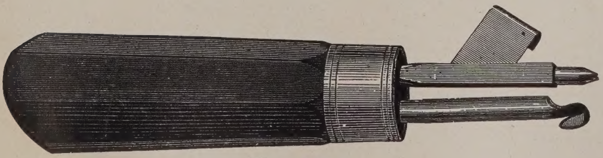


PLUMB BOB CORDS

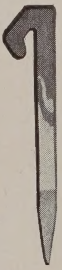
No. 3432. Plumb Bob Cords, best linen; thin, medium or thick. . . . . . Per yard,

3433. Plumb Bob Cord, best braided silk, medium or thick. . . . . . Per yard,

TIMBER SCRIBE



No. 3439



No. 3440

No. 3439. Timber Scribe or Tree Marker, 6½ inches long. Each . . . .

3440. Surveying Spads. . . . . Per 100, Per 1,0000,

FRISCO LEVELING RODS

FRISCO RODS

PATENT

This is the lightest and most compact Leveling Rod made. New features embodied in its construction enable us to do away with all projecting clamps and set screws. There is not a single removable part to become loose and get lost. It is the ideal rod to carry in an automobile or baggage car. When extended and set for work, accidental knocks and jolts cannot make it slip the smallest fraction of an inch from the set position.

This rod is self reading up and down, has a graduated scale with vernier on the right side as well as on the face of the rod.

No. 3450. Frisco Rod, 3 ply..........Each

Length—4½ feet, extending to 12 feet.

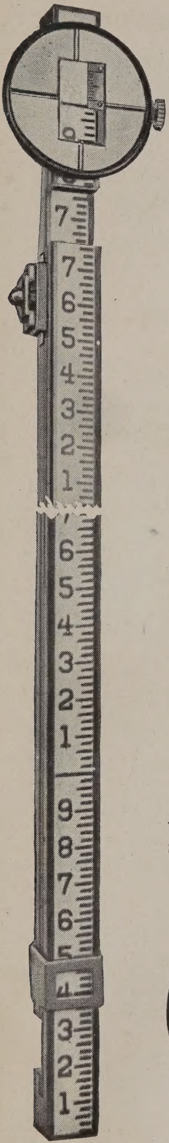
Divided—feet, 10ths and 100ths, vernier reading to 1000ths of a foot.

No. 3451. Frisco Rod, 3 ply..........Each

Length—5½ feet, extending to 15 feet.

Divided—feet, 10ths and 100ths, vernier reading to 1000ths of a foot.

POST'S IMPROVED PHILADELPHIA LEVELING RODS



Many exclusive improved features add to the efficiency of this new type Post Philadelphia Rod without increasing the purchase price. The improvements are extremely practical and have already found favor with many users.

Wood. Our Leveling Rods are made of thoroughly seasoned, straight-grained Maple, especially selected and treated so as to prevent binding or warping, caused by atmospheric changes.

Figures and Graduations. The figures and graduations on Post's Leveling Rods are not merely painted on surface, but are impressed into the recessed portion of the Rods, increasing their definition and durability.

Finishing. In finishing our Leveling Rods, special care is used to see that all wood portions are well protected with several coats of wear-resistant waterproof varnish. The white background for the figures is prepared with extra hard Pyrolin enamel, which stays pure white and is specially rubbed so as to give off minimum light reflection, making it easy to read the sharp, clear, black figures.

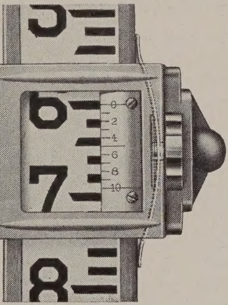


Fig. A

VERNIER CLAMP (See Fig. A)

For better protection and as reinforcement against splitting, this sets about ½ inch below end of Rod. Vernier is set flush with face. While the form of Screw differs from that used in Target, it has the same improved Spring (see Fig. A). Screw head is protected by a cap and cannot fall out, become sprung or break off.

IMPROVED SLIDING CLAMP

To allow for expansion, due to dampness, the Sliding Clamp has been ingeniously designed to give the required extra play. This is so well done that there is no extra looseness apparent.

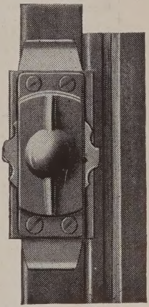
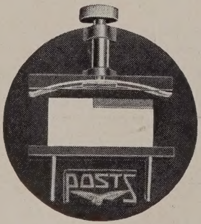


Fig. B



IMPROVED SCREW CLAMP TARGET

Has slightly raised quarter dividing lines giving better definition. Dull finish, eliminating glare. Brass Vernier set in flush with face and with extra brackets on the back for additional reinforcement.

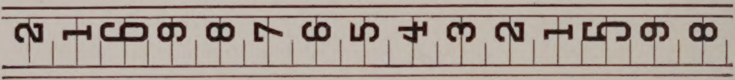
TARGET CLAMPING SCREW AND SPRING

Clamping screw is constructed so it cannot fall out and holds target accurately in any desired position. Pressure is exerted and released on our specially constructed spring, which does not bind when the tension is released and permits free movement of the target up or down the rod.

STANDARD LEVELING RODS

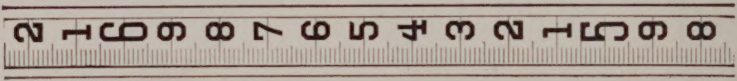
PHILADELPHIA RODS (HEAVY)

In the following listings we endeavor to show an illustration of the divisions on the Leveling Rods used in all branches of engineering work. The foot marks on the Rods are printed in red. This does not show in the following illustrations.



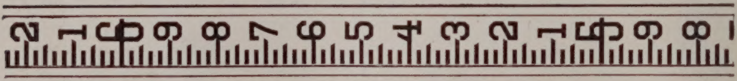
Length—7 feet, sliding out to 13 feet.
Divided—feet, 10ths and half 10ths; vernier reading to 200ths of a foot.

No. 3452. Philadelphia Rod, with round target, screw clamp........Each,
3452B. " " " oval " " " ....
3452C. " " " rolling angle target, screw clamp..



Length—7 feet, sliding out to 13 feet.
Divided—feet, 10ths and 100ths; vernier reading to 1000ths of a foot line cut divisions.

No. 3453. Philadelphia Rod, with round target, screw clamp........Each,
3453B. " " " oval " " " ....
3453C. " " " rolling angle target, screw clamp..

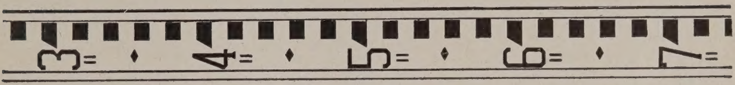


Length—7 feet sliding out to 13 feet.
Divided—feet, 10ths and 100ths; vernier reading to 1000ths of a foot.

No. 3454. Philadelphia Rod, with round target, screw clamp........Each,
3454B. " " " oval " " " ....
3454C. " " " rolling angle target, screw clamp..

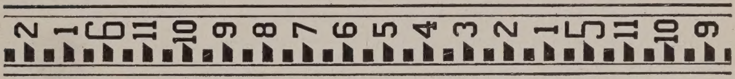
STANDARD LEVELING RODS

PHILADELPHIA RODS (HEAVY)—Continued



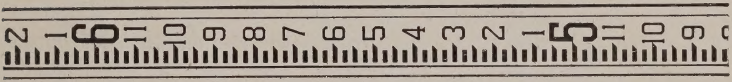
Length—2.2 meters, sliding out to 4 meters.
Divided—meters, decimeters and centimeters; Vernier reading to millimeters.

No. 3455. Philadelphia Rod, with round target, screw clamp.......Each,
3455B. “ “ “ oval “ “ “ ....
3455C. “ “ “ rolling angle target, screw clamp



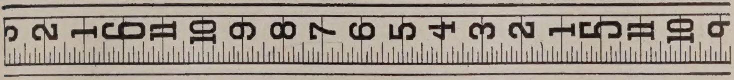
Length—7 feet, sliding out to 13 feet.
Divided—Feet, inches and ¼ inches; vernier reading to 1/16 of an inch.

No. 3456. Philadelphia Rod, with round target, screw clamp......Each,
3456B. “ “ “ oval “ “ “ ....
3456C. “ “ “ rolling angle target, screw clamp..



Length—7 feet, sliding out to 13 feet.
Divided—feet, inches and ⅛ inches; vernier reading to 1/64 of an inch.

No. 3457. Philadelphia Rod, with round target, screw clamp......Each,
3457B. “ “ “ oval “ “ “ ....
3457C. “ “ “ rolling angle target, screw clamp



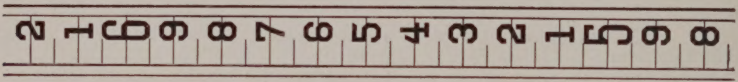
Length—7 feet, sliding out to 13 feet.
Divided—feet, inches and ⅛ inches; vernier reading to 1/64 of an inch line cut divisions.

No. 3458. Philadelphia Rod, with round target, screw clamp......Each,
3458B. “ “ “ oval “ “ “ ....
3458C. “ “ “ rolling angle target, screw clamp

STANDARD LEVELING RODS

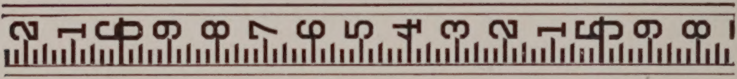
PHILADELPHIA RODS (LIGHT)

Our Light Philadelphia Leveling Rods are made of the same high-grade materials with the same care and precision as the Heavy Philadelphia Rods. These Rods will stand all the abuse, wear and tear of the heavier Rod, but due to their lighter weight, are found especially advantageous where the country is of a mountainous nature.



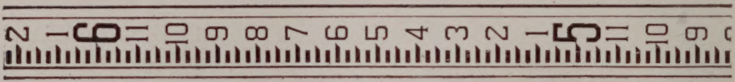
Length—6½ feet, sliding out to 12 feet.
Divided—feet, 10ths and half 10ths; vernier reading to 200ths of a foot.

No. 3459. Light Philadelphia Rod, with round target, screw clamp . . . Each,
3459B. " " " " oval " " " . . .
3459C. " " " " rolling angle target, screw clamp



Length—6½ feet, sliding out to 12 feet.
Divided—feet, 10ths and 100ths; vernier reading to 1000ths of a foot.

No. 3460. Light Philadelphia Rod, with round target, screw clamp . . . Each,
3460B. " " " " oval " " " . . .
3460C. " " " " rolling angle target, screw clamp



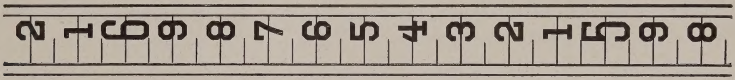
Length—6½ feet, sliding out to 12 feet.
Divided—feet, inches and ⅛ inches; vernier reading to 1/64th of an inch.

No. 3461. Light Philadelphia Rod, with round target, screw clamp . . . Each,
3461B. " " " " oval " " " . . .
3461C. " " " " rolling angle target, screw clamp

STANDARD LEVELING RODS

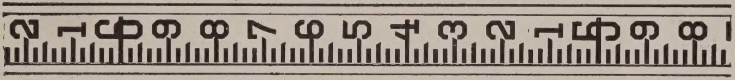
MINING RODS—LIGHT PHILADELPHIA TYPE

The fittings and rod portions of POST'S Mining Rods are the same as used on our Light Philadelphia Type, but in shorter sections, especially adapted for work in mine tunnels.



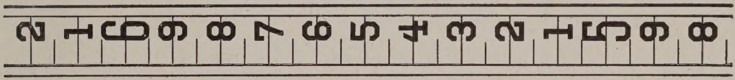
Length—5 feet, sliding out to 9 feet.
Divided—feet, 10ths and half 10ths; vernier reading to 200ths of a foot.

No. 3462. Mining Rod, with round target, screw clamp............Each,
3462B. “ “ “ oval “ “ “ ....
3462C. “ “ “ rolling angle target, screw clamp......



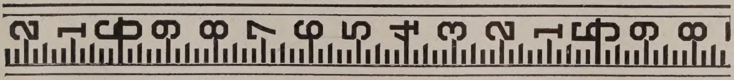
Length—5 feet, sliding out to 9 feet.
Divided—feet, 10ths and 100ths; vernier reading to 1000ths of a foot.

No. 3463. Mining Rod, with round target, screw clamp............Each,
3463B. “ “ “ oval “ “ “ ....
3463C. “ “ “ rolling angle target, screw clamp......



Length—3 feet, sliding out to 5 feet.
Divided—feet, 10ths and half 10ths; vernier reading to 200ths of a foot.

No. 3464. Mining Rod, with round target, screw clamp............Each,
3464B. “ “ “ oval “ “ “ ....
3464C. “ “ “ rolling angle target, screw clamp......

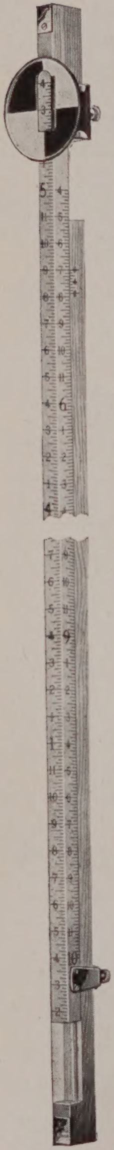


Length—3 feet, sliding out to 5 feet.
Divided—feet, 10ths and 100ths; vernier reading to 1000ths of a foot.

No. 3465. Mining Rod, with round target, screw clamp............Each,
3465B. “ “ “ oval “ “ “ ....
3465C. “ “ “ rolling angle target, screw clamp......

STANDARD LEVELING RODS

ARCHITECTS' RODS


No. 3466

POST'S Architects' Rods are made of straight grained, thoroughly seasoned, pure white Maple, prepared and treated in such a way to insure perfect action at all times of the specially arranged sliding joint. These Rods are reinforced and protected at each end with a sturdy shoe, and are much lighter in weight and construction than regular Philadelphia Leveling Rods; however, are divided with the same accuracy permitting the same accurate readings. These Rods have been found invaluable for construction work.

Length—5½ feet, sliding out to 10 feet.
Divided—feet, inches and ⅛ inches; vernier reading to 1/64th of an inch.

No. 3466. Architects' Rod, with round target, screw clamp ....Each,

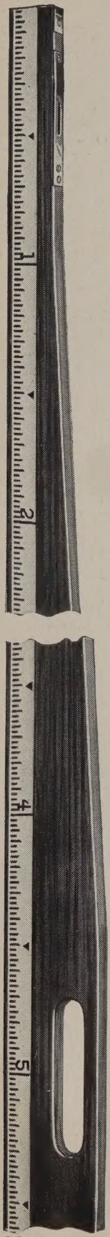
Length—5½ feet, sliding out to 10 feet.
Divided—feet, 10ths and 100ths, vernier reading to 1000ths of a foot.

No. 3467. Architects' Rod, with round target, screw clamp ....Each,

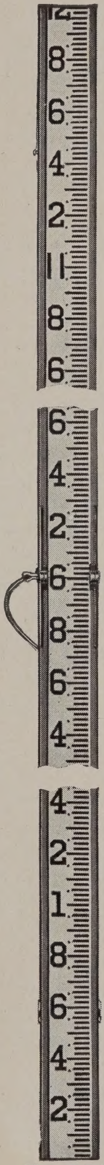
The No. 3468 Architects' Leveling Rod consists of two pieces of carefully selected straight grained Maple, 4 feet in length with a convenient joint and sliding target, making an 8-foot Rod. This Rod is especially recommended for farm use for leveling and drainage work.

Length—8 feet, in two sections.
Divisions—feet, inches and ¼ inches.

No. 3468. Architects' Rod ....Each,



No. 3474



No. 3473

STANDARD LEVELING RODS

STADIA RODS

The ever-increasing demand for Rods adapted to Stadia measurements has caused us to construct a Rod of convenient design and with an arrangement of markings that are easily read at long distances.

The Rod consists of two pieces of carefully selected, straight grained wood, joined with an extra strong metal hinge with convenient and rigid locking device to hold the Rod secure when extended.

POST'S Stadia Rods are finished by a special process. The figures on the face are sharp and the background specially treated so as to overcome reflection.

Length—6 feet, folding
out to 12 feet.
Divided—feet, 10ths and
100ths; self-reading.

No. 3473. Stadia Rod ....Each,

CROSS SECTION RODS

Made of hardwood, one piece, with adjustable spirit levels at each end and an open hand grip at the middle.

Length—10 feet.
Divided—feet, 10ths and
100ths; self-reading.

No. 3474. Cross Section Rod ......Each,

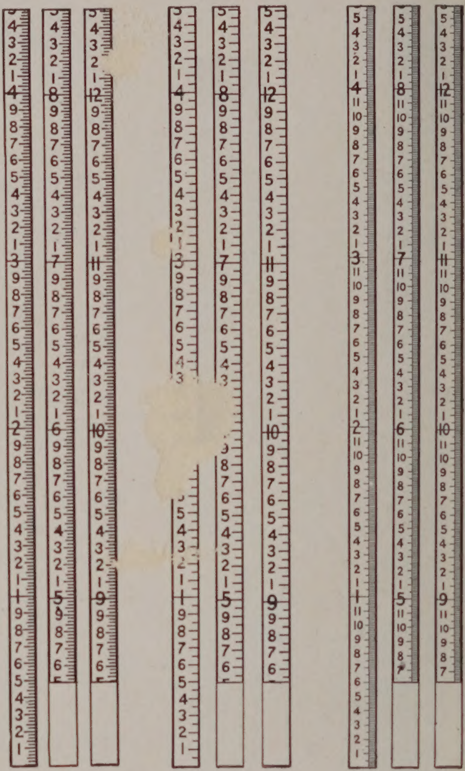
THE CHICAGO LEVELING ROD

The Improved "Chicago" Leveling Rod is essentially a self-reading rod, but will be furnished with target if desired.

It is made of 3 or 4 pieces of selected hardwood, 2 inches wide, 1 inch thick and 4½ feet long. Its face is beaded to protect the graduations. These pieces are highly polished; natural finish. They are jointed by telescope socket joints, fit perfectly and yet work smoothly, making, when put together, as rigid a rod as ever devised. The face is all on one plane and the entire rod, from top to bottom, when extended, is the same size, making it possible to use two targets for stadia work.

The rods are furnished in strong, heavy, canvas sacks with three pockets folding upon each other, thus making a very convenient and handy package.

The three pieces, put together, give it its standard height of 12½ feet. An extra length will increase the height to 16½ feet.



A B C

Each

No. 3477A. "Chicago" Rod, 3 sections, total length 12½ feet; self-reading. Divided—feet, 10ths and 100ths, numbering up.

3477B. "Chicago" Rod, 3 sections, total length 12½ feet; self-reading. Divided—feet, 10ths and half 10ths, numbering up. . . . .

3477C. "Chicago" Rod, 3 sections, total length 12½ feet; self-reading. Divided—feet, inches and eighths, numbering up.

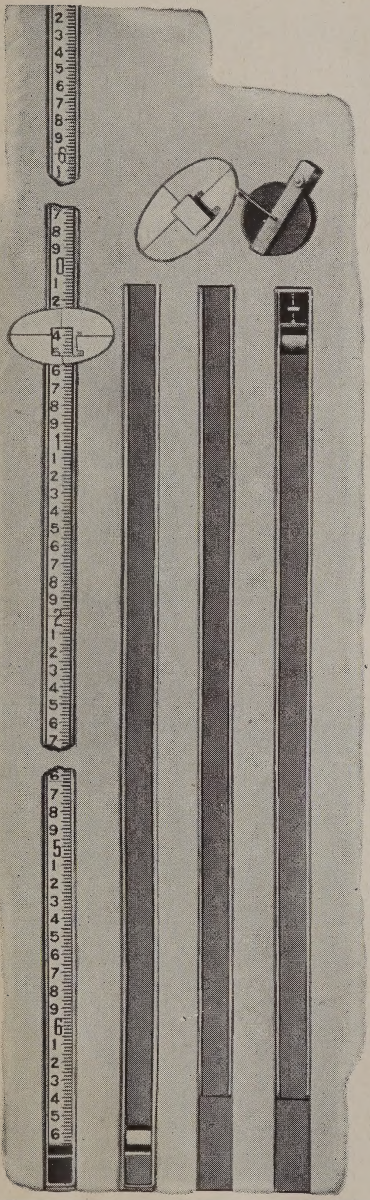
3478A. "Chicago" Rod, 4 sections, total length 16½ feet; self-reading. Divided—feet, 10ths and 100ths, numbering up.

3478B. "Chicago" Rod, 4 sections, total length 16½ feet; self-reading. Divided—feet, 10ths and half 10ths, numbering up . . . .

3478C. "Chicago" Rod, 4 sections, total length 16½ feet; self-reading. Divided—feet, inches and eighths, numbering up.

All of the Above Rods Can Be Furnished with or Without Targets

CHICAGO SELF-COMPUTING ROD



Patent Pending

This Rod is made of 3 pieces, 2 inches wide, 1 inch thick, and 4½ feet long, joined by telescope metal joints. Choice wood, hand polished, natural finish, with rollers at each end over which pass a metal ribbon. The rod is 12½ feet long and has a 12-foot working face.

This ribbon is graduated in two styles, D or E, as described under No. 3482.

A Reel is provided for the ribbon to be coiled on when not in use.

When in use the ribbon ends are hooked together at the back of the rod, making practically an endless ribbon.

This is moved up or down by directions from the instrument, and clamped when it gives the desired reading.

A 7-inch long diameter, oval Target, is furnished with each rod.

No. 3479A. "Chicago" Self-Computing Rod in cloth case, complete with target . . . . .Each,

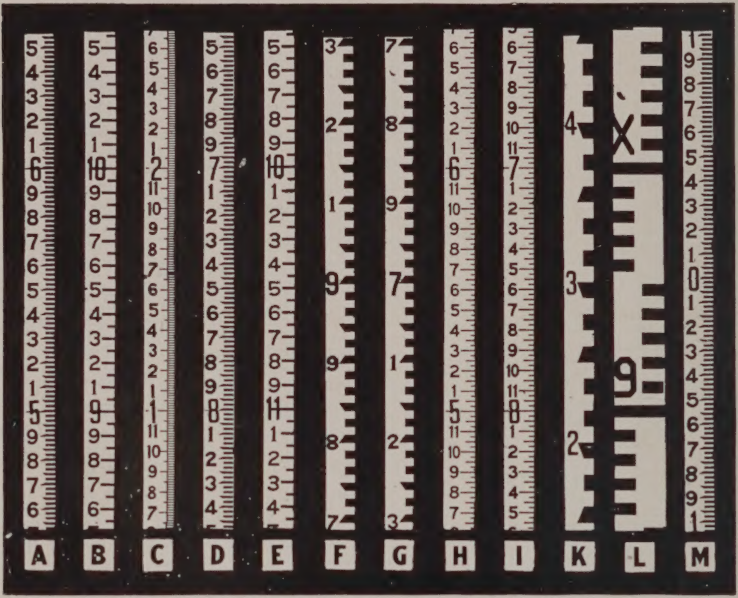
3479B. "Chicago" Self-Computing Rod in cloth case, without target . . . . .Each,

The Stadia Targets are made as large as can be conveniently carried so as to be able to take long sights. They are furnished in pairs, have screw clamps to firmly set them to any fixed point. They can be slid easily up and down the rod and can be readily slipped off.

No. 3480A. "Chicago" Stadia Targets, 8x8 inches square . Per Pair,

3480B. "Chicago" Stadia Targets, round, 8 inches diameter . . . . .Per Pair,

CHICAGO RIBBON GRADUATIONS



Unit figures (except K and L) printed red, decimal black

No. 3482. CHICAGO ROD RIBBONS.

Made of especially prepared paper cloth, 1½ and 1⅛ inches wide. By pasting or tacking them on O. G. Battens they make excellent temporary Leveling Rods, Stadia Rods, Water Gauges, etc.

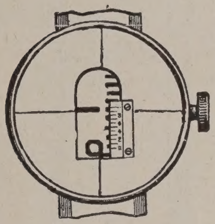
GIVE CATALOG NO. AND LETTER WHEN ORDERING

A Feet, 10ths and 100ths Numbering Up
B Feet, 10ths and ½ 10ths Numbering Up
C Feet, Inches and 8ths Numbering Up
D Feet, 10ths and 100ths Numbering Down
E Feet, 10ths and ½ 10ths Numbering Down
F Meters, 10ths and 100ths Numbering Up
G Meters, 10ths and 100ths Numbering Down
H Feet, Inches and ¼ Inches Numbering Up
I Feet, Inches and ¼ Inches Numbering Down
K Links and 10ths Numbering Up
L Feet and ½ 10ths 2½ Inches wide
M Any Style numbering both ways from a Center

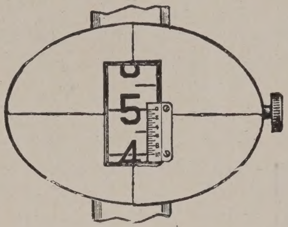
Lengths	**Paper Cloth**	**Brass**
12½ ft. or under.................... Each,		
12½ ft. to 16½ ft....................		
16½ ft. to 20½ ft....................		

"L" 2½ inches wide, 12 feet length not furnished in brass.
Reel furnished with brass ribbons.

SEPARATE TARGETS FOR LEVELING RODS



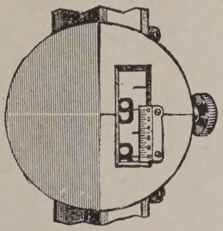
No. 3491

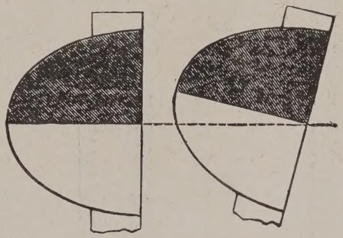


No. 3492

No. 3491. Round target for Philadelphia Rods, screw clamp.....Each,
3492. Oval target for Philadelphia Rods.................. "

When ordering extra targets, please give exact cross section of the rod and its divisions, or give its catalog number.



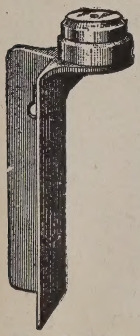


No. 3494

No. 3494. Rolling Angle Target for Heavy Philadelphia Rods....Each,
3495. Rolling Angle Target for Light Philadelphia Rods..... "

The object of this target is to make sure that the rod is being held perpendicular to the line of sight of the observer. The horizontal dividing line of these targets extends over two surfaces, placed at right angles to each other, thus showing a continuous and unbroken line only when the rod is held perfectly vertical.

The target strings have rollers bearing against the rods, which permit the target to be slid easily up and down the rod and, therefore, allows a very much more accurate sitting.



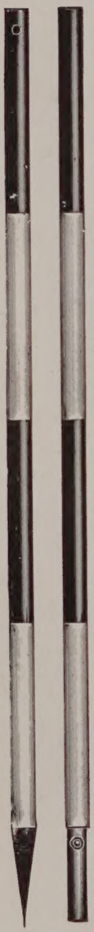
No. 3496

ROD LEVEL

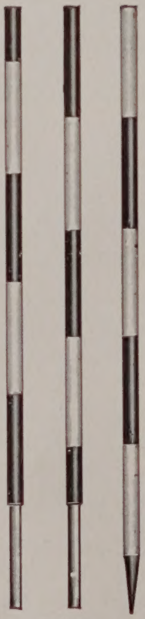
No. 3496. Rod Level, brass, circular bubble level, 1 inch diameter ....Each,

This Rod Level is used to determine if the rod is being held perpendicular. Proper contact is insured through the long angle blade, when held to the rod. It may also be attached to the rod by means of a screw, for which there is a key-hole slot in the blade.

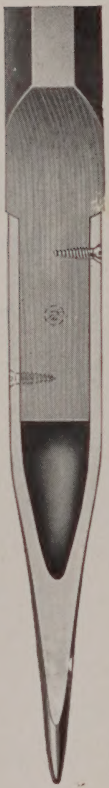
RANGING POLES



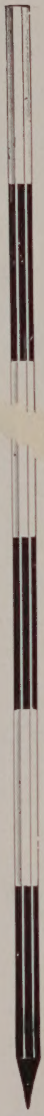
3500



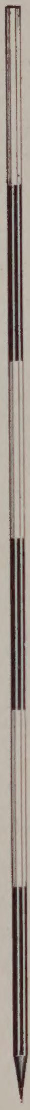
3502



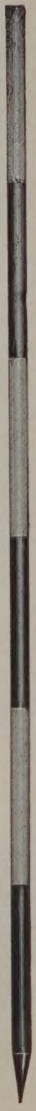
Cross
Section
showing
construction
of
No. 3504
Shoe.



3504



3508



3510

See Next Page for Description

RANGING POLES

THE "CHICAGO"

Our "Chicago" Ranging Pole is 8½ feet long and 1⅛ inches in diameter. Made of steel tubing in two parts with telescope joints, shod with a hard steel tip, each alternate foot is japanned red and white.

Steel is well worth its cost because of extra durability. The "Chicago" Ranging Pole packs to 4½ feet lengths, is furnished with a two-pocket sack of strong cloth, making it as easily carried as an umbrella.

Joints are locked with an automatic spring catch. It is perfectly rigid, straight and absolutely unequaled.

No. 3500. **"Chicago" Ranging Pole,** 8½ feet........................Each,

THE LITTLE "CHICAGO"

This pole is 7¼ feet long and ⅝ inches in diameter. Weighs only two pounds, is very accurate, and is large, long and strong enough to insure its all-purpose efficiency.

Made of three-section metal tubing, with telescopic joints; it is rigid, straight and shod with a steel tip. Japanned red and white, alternating every six inches. Packs to 33 inches to go with an extension tripod, and is furnished with a three-pocket sack of strong cloth. Cannot be excelled for mining, city work or any kind of surveying job.

No. 3502. **"Little Chicago" Ranging Pole,** 7¼ feet.................Each,

No. 3504. Ranging Pole, best seasoned Hardwood, tapered octagonal.

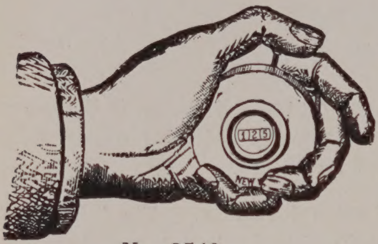
	6 ft.	8 ft.	10ft.
Each..................................			

No. 3508. Steel Ranging Pole, ½-inch diameter, octagonal, solid.

	6 ft.	8 ft.	10ft.
Each..................................			

No. 3510. Tubular Iron Ranging Pole, ⅞-inch diameter.

	6 ft.	8 ft.	10ft.
Each..................................			



No. 3540

TALLYING MACHINES

No. 3540. Benton Automatic Tally Register, vest pocket size, registering from 0 to 999. .... Each,

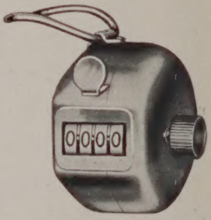
3542. Tallying Machine, for keeping count by pressing on a knob, nickel-plated, registering from 0 up to 9999......Each,

QUICK SET-BACK HAND TALLY COUNTER

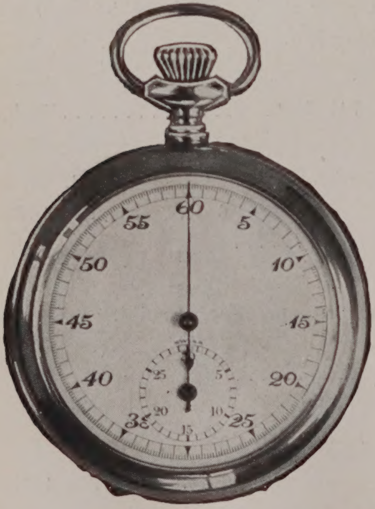
This is a new instrument with four figures, registering to 9999, embodying a number of desirable features not found in any other hand tally, chief among which is the fact that it can be quickly set to zero by one turn of the knob. The nickel-plated case is small in size and has been designed with rounded corners so as not to irritate the hand of the user, nor to wear the pockets when carrying it. Also, the finger ring has been so located that it can be held in either hand when being used.

This counter is useful for many purposes.

No. 3543. Set-Back Hand Tally Counter...Each,



No. 3543



No. 3543½

STOP WATCH

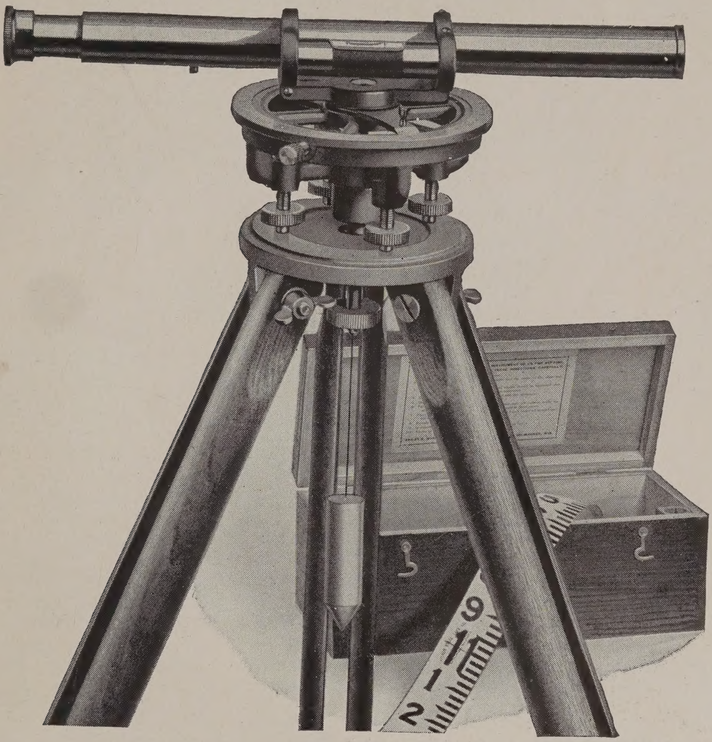
No. 3543½. Stop Watch, stem-winder, nickel-plated case, porcelain dial, registering to 30 minutes by ⅕ second; fly-back, engaging and disengaging mechanism. ....Each,

PEDOMETER AND PACEOMETER

3544A. Pedometer, nickel case, registering distances walked to 100 miles...Each,

FARM AND DRAINAGE LEVEL

This is an excellent instrument for work which does not require engineering accuracy. It has proved an invaluable aid to the carpenter contractor, road builder and farmer for laying out foundations, leveling alignment of joists and window sills, ditching, draining, fencing, etc.

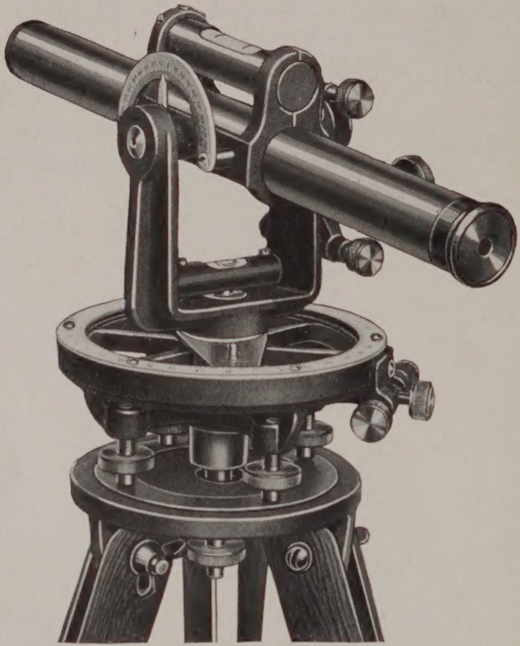


No. 3850

		Each
No. 3850.	Utility Level (Improved Farm Level) is one of the sturdiest most compact and most practical instruments of its kind ever put on the market. It has a 10-inch telescope with adjustable eyepiece, fixed cross hairs, ten diameter, achromatic lens system, horizontal circle graduated to degree, index arm, four leveling screws and spirit level. Complete equipment includes carrying case, tripod, plumb bob, 12½-ft. flexible rod and a book of instructions......	
3852.	Same as the above, but with rigid extension target rod in place of standard flexible rod.........................	
3854.	**COMPLETE OUTFIT,** containing No. 3850 Level with Tripod, No. 3466 Extension Rod and No. 3237, 50-ft. Steel Measuring Tape	

MIDGET TRANSIT

(Patent Applied For)



No. 3864

A simple and complete Combination Instrument for leveling and plumbing from the same set-up. For leveling, the telescope is clamped and brought exactly level instantly by a slight turn of tangent screw. For use in vertical plane release telescope clamp screw and tilt telescope. Vertical angles are read or laid off on the graduated vertical arc and horizontal angles are laid off on graduated circle. Control level on standard guards against error at all times. Cross wires are set exactly on point to be sighted with tangent screws.

TELESCOPE—Erecting, 10 inches long, magnifying power, 10 diameters. Cross wires. Improved rack and pinion for focusing. Clamp and tangent.

SPIRIT LEVEL—2½ inches long, ground and graduated.

VERTICAL ARC—2¼ inches diameter, graduated in degrees and numbered 0 to 80, both ways, with index.

STANDARDS—Bronze integral; has patented axis adjustment. 1½-inch ground, graduated, control level attached.

HORIZONTAL CIRCLE—4½ inches diameter, graduated in degrees and numbered in quadrants (0-90-0) with vernier reading to 10 minutes. Clamp and tangent.

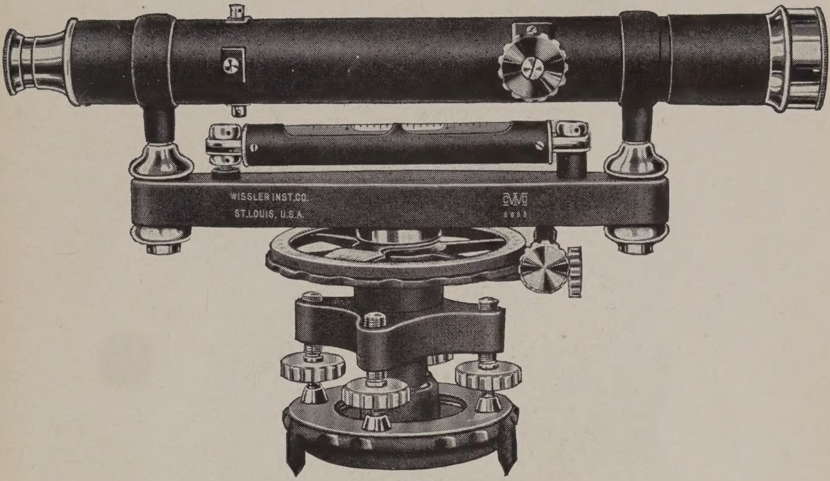
BASE—Bronze reinforced, has 4 leveling screws; shifting center.

FINISH—Black enamel and bakelite lacquer.

EQUIPMENT—Plumb bob, in finished box, hinged leg tripod and sectional 9-foot rod with target.

	Each
No. 3864. Outfit, Complete	

BUILDERS' DUMPY LEVEL



No. 3892

TELESCOPE—Erecting, 12 inches long, dust-proof; magnifying power 25 diameters; 1¼-inch objective with rack and pinion; eyepiece has spiral adjustment for focusing cross wires.

SPIRIT LEVEL—5 inches long, ground and graduated, 60 to 120 seconds.

LEVEL BAR—Reinforced cast bronze, with rigid telescope supports.

CIRCLE—4-inch machine, divided in degrees and engraved in quadrants, with corrugated edge for setting to zero; vernier reading to 5 minutes.

CENTER—Bell metal, accurately fitted and tested; clamp screw; 4 leveling screws with cups attached; shifting center and base plate with trivet points.

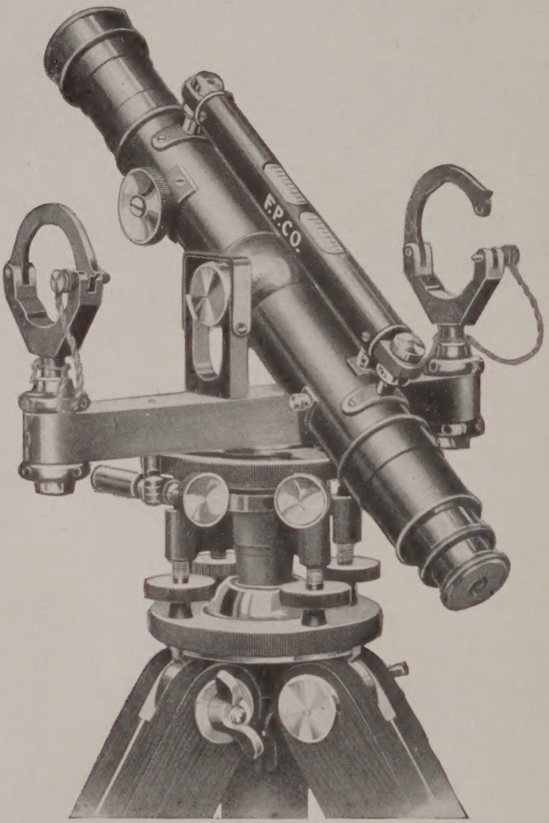
FINISH—Black enamel and bakelite lacquer.

EQUIPMENT—Plumb bob in finished hardwood box with strap, round leg tripod.

WEIGHT—Instrument 6 lbs. Tripod 6 lbs.

No. 3890.	Outfit, Complete	Each
3892.	Same as No. 3890, but with clamp and tangent attachment for horizontal circle	Each
	Light Split Ash Leg Tripod	Extra
	Telescopic Extension Leg Tripod	Extra

CONVERTIBLE ARCHITECTS' LEVEL



No. 3900

Each

No. 3900. **CONVERTIBLE ARCHITECTS' LEVEL,** same instrument as Level No. 3890, with clamp and tangent screw, but arranged for VERTICAL as well as HORIZONTAL sights.

Short fixed arms or extensions are attached to both sides of the telescope, being made in one piece with the telescope. These arms fit into a pair of auxiliary wyes, permanently attached to the level bar, as shown in illustration.

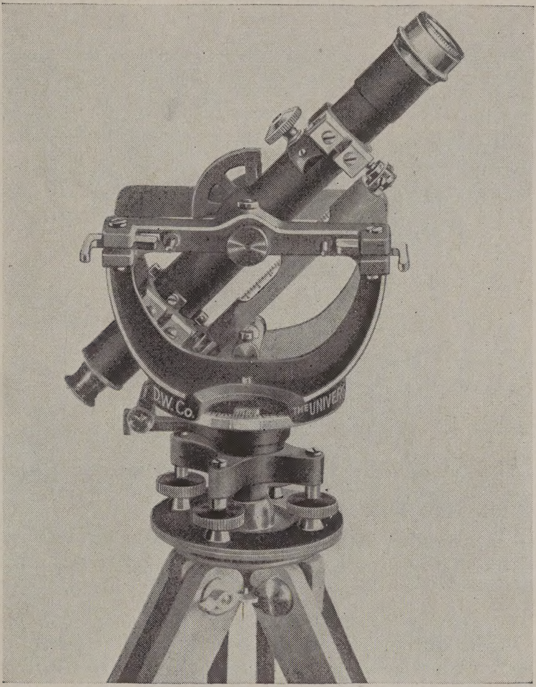
For vertical sighting, the telescope is lifted out of the regular wyes and simply placed in the small wyes. The upper part of these small wyes are folded back when not in use, and do not interfere with the telescope when same is in its regular position.

The telescope level vial is graduated on both sides. (See illustration.) This is the most practical type of Convertible Level, as there are no loose parts (which are liable to be left behind), and it dispenses entirely with the objectionable features of replacing or attaching such extra parts as necessary in other types.

The instrument is furnished complete with tripod, mahogany box, trivet and plumb bob...

No. 3902. **COMPLETE OUTFIT,** containing No. 3900 Level with Tripod, No. 3446 Extension Rod, and No. 3237, 50-ft. Steel Measuring Tape...........

UNIVERSAL LEVEL-TRANSIT



No. 3905

This Level-Transit has Erecting Telescope 12 inches long, magnifying power 25 diameters, object glass 1¼ inches, rack and pinion movement for object slide for focusing screw on top of telescope. Spiral adjustment eyepiece. Cross or stadia hairs optional. Long spirit level, sensitive to 60 seconds of arc to 1/10th inch motion of air bubble.

Horizontal Circle silvered, 4¼ inches, divided into degrees numbered from 0 to 90 in quadrants, vernier reading to 5 minutes.

Vertical Arc silvered, 3-inch diameter reading to degrees.

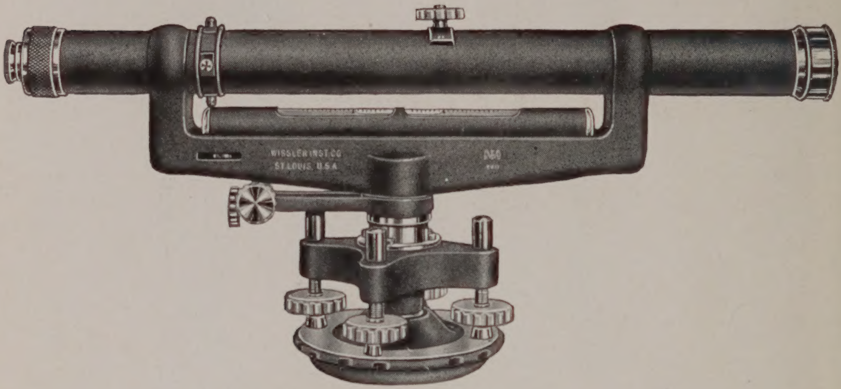
Leveling Head, transit design, extra heavy leveling screws. Shifting base. Trivet style Leveling Plate.

Complete in neat wood carrying case with Split Leg Tripod. Weight of Instrument, 11 pounds. Tripod, 9 pounds. Total shipping weight, 39 pounds.

Each

No. 3905. Outfit, Complete . . . .
3905A. With Compass . . . .
3905B. With fixed stadia hairs. . . . .
3905C. With telescope clamp and tangent. . . . .
3905D. 5-minute vernier in place of index on vertical arc. . . . . .
3905E. With extension tripod in place of split leg tripod. . . . .

NEW MODEL ENGINEERS' DUMPY LEVEL



No. 3920

Will give absolute accuracy and hold perfect adjustment under all conditions.

TELESCOPE—Achromatic terrestrial, 18″ long; objective 1⅜″, magnifying power 35 to 40 diameters, dust proof object slide; erecting eyepiece with a large flat field, has fine straight focusing adjustment.

LEVEL BAR—New design of special bronze, with integral telescope supports. 8″, very fine ground graduated spirit level, 35 seconds **(any sensitiveness can be furnished).**

CENTER—Very strong special composition, non-friction metal, which is unyielding and has minimum expansion and contraction. Clamp and tangent. 4 large nickel silver leveling screws with cups attached, and dust caps. Large base plate.

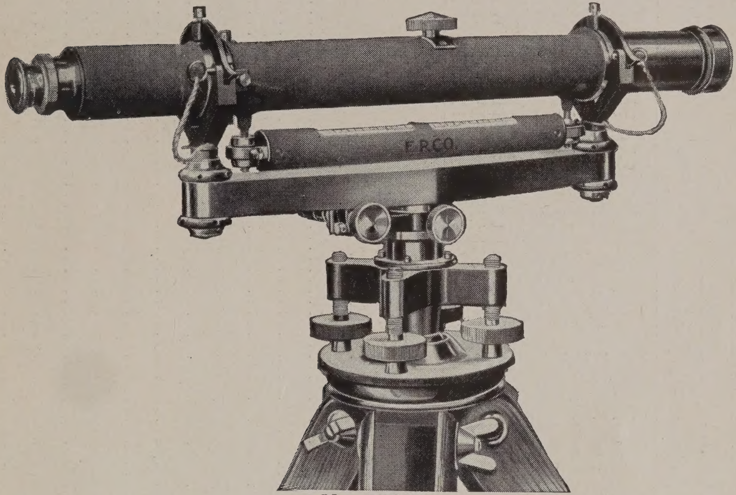
FINISH—Black morocco, baked black enamel and bakelite lacquer.

EQUIPMENT—Sun shade, adjusting pin, in mahogany box with lock and strap; large split leg tripod.

WEIGHT—Instrument, 10 pounds. Tripod, 11 pounds.

No. 3920.	Complete	Each
3921.	Engineers' Dumpy Level, 16″ Telescope, Split Leg Tripod	
3922.	Engineers' Dumpy Level, 20″ Telescope, Split Leg Tripod	
3923.	Engineers' Dumpy Level, 22″ Telescope, Split Leg Tripod	
A	Fixed Stadia Wires, 1:100	Extra
B	Steel Center	
C	Large Extension Leg Tripod instead of Large Split Leg Tripod	

ENGINEERS' WYE LEVEL



No. 3930

Will give absolute accuracy and hold perfect adjustment under all conditions.

TELESCOPE—Achromatic terrestrial, 18″ long; objective 1⅜″, magnifying power 35 to 40 diameters, erecting eyepiece with a large flat field has fine straight focusing adjustment. Large bell metal collars and dust proof object slide. 8″ very fine ground graduated spirit level, 35 seconds; **(any sensitiveness desired can be furnished).**

LEVEL BAR—Especially designed of toughest bronze; large compact Ys and firm clips held secure by pins.

CENTER—Very strong special composition non-friction metal, which is unyielding and has minimum expansion and contraction. Clamp and tangent. 4 large nickel silver leveling screws with cups attached, and dust caps. Large base plate.

FINISH—Black morocco, baked black enamel and bakelite lacquer.

EQUIPMENT—Sun shade, adjusting pin, in mahogany box with lock and strap; large split leg tripod.

WEIGHT—Instrument, 11 pounds. Tripod, 11 pounds.

No. 3930.	Complete	Each
3931.	Engineers' Y Level, 16″ Telescope, Split Leg Tripod	
3932.	Engineers' Y Level, 20″ Telescope, Split Leg Tripod	
3933.	Engineers' Y Level, 22″ Telescope, Split Leg Tripod	
A	Fixed Stadia Wires, 1:100	Extra
B	Steel Center	
C	Large Extension Leg Tripod instead of Large Split Leg Tripod	

SPECIFICATIONS OF PRECISE ENGINEERS' TRANSITS

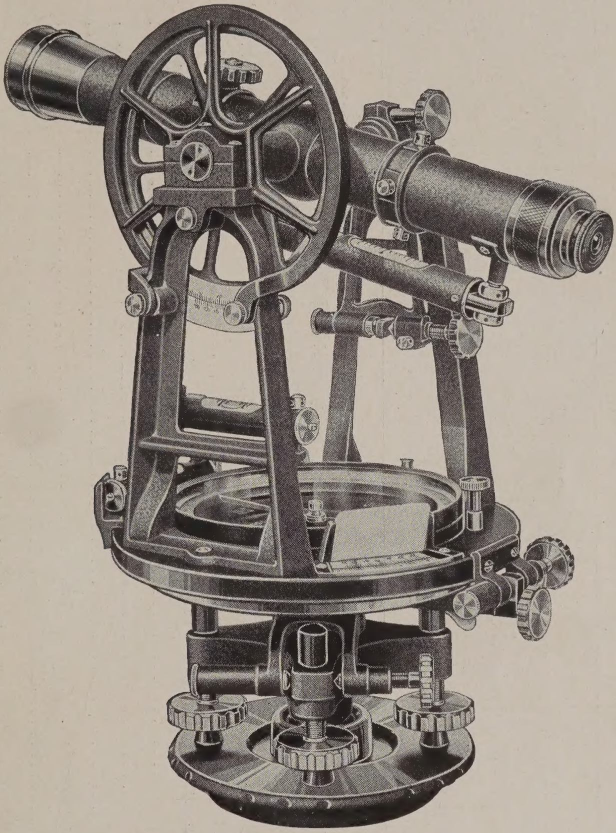
Cat. No.	Erecting Telescope			Vertical		Vernier Reading	Telescope Level		Compass Needle	Variation Vernier	Limb		Weight Instrument	Weight Tripod	Code Word
	Length	Objective	Power	Arc	Circle		Length	Value			Diameter	Graduation			
3950	11½″	1⅜″	24						4⅛″	1 min.	6⅛″	½° to 1′	15 lbs.	11 lbs.	WICOB
3951	11½″	1⅜″	24				5¾″	40 Sec.	4⅛″	1 min.	6⅛″	½° to 1′	15½ lbs.	11 lbs.	WICOC
3952	11½″	1⅜″	24	4¾″		1 min.	5¾″	40 Sec.	4⅛″	1 min.	6⅛″	½° to 1′	15¾ lbs.	11 lbs.	WICOD
3953	11½″	1⅜″	24		4¾″	1 min.	5¾″	40 Sec.	4⅛″	1 min.	6⅛″	½° to 1′	15¾ lbs.	11 lbs.	WICOF
3954	11½″	1⅜″	24		4¾″	1 min.	5¾″	40 Sec.	4⅛″	1 min.	6⅛″	½° to 1′	16 lbs.	11 lbs.	WICOG
3960	10 ″	1⅜″	22						3⅝″	1 min.	5⅜″	½° to 1′	12 lbs.	11 lbs.	WICOH
3961	10 ″	1⅜″	22				4¾″	40 Sec.	3⅝″	1 min.	5⅜″	½° to 1′	12½ lbs.	11 lbs.	WICOJ
3962	10 ″	1⅜″	22	4¾″		1 min.	4¾″	40 Sec.	3⅝″	1 min.	5⅜″	½° to 1′	12¾ lbs.	11 lbs.	WICOK
3963	10 ″	1⅜″	22		4¾″	1 min.	4¾″	40 Sec.	3⅝″	1 min.	5⅜″	½° to 1′	12¾ lbs.	11 lbs.	WICOL
3964	10 ″	1⅜″	22		4¾″	1 min.	4¾″	40 Sec.	3⅝″	1 min.	5⅜″	½° to 1′	13 lbs.	11 lbs.	WICOM

All Transits Listed Above Furnished with Extra Heavy Split Leg Tripod

ATTACHMENTS AND EXTRAS FOR PRECISE TRANSITS

A—Large Extension Leg Tripod instead of Large Split Leg Tripod....................Extra
B—Limb Graduations reading to 30 seconds....................
C—Limb Graduations reading to 20 seconds....................
D—Gradienter Attachment....................
E—Beaman Stadia Arc....................
F—Reflector for Telescope....................
G—Double Opposite Verniers for Vertical Circle....................
H—Solar Glass in Eyepiece Cap....................
J—Prismatic Eyepiece Attachment with Solar Glass....................
K—Improved Solar Attachment with Telescope....................
L—Auxiliary Side or Top Telescope with counterweight....................

PRECISE ENGINEERS' TRANSIT



No. 3954

A complete transit for rapid work requiring extreme accuracy.

TELESCOPE—Erecting, 11½″ long; objective 1⅜″; magnifying power 24 diameters; cross hairs and fixed stadia wires 1:100. Eyepiece has fine straight focusing adjustment. Clamp and tangent. Axis has 3-point straight bearing.

LEVEL—Very fine, ground and graduated, 5¾″ long, 40 seconds.

VERTICAL CIRCLE—4¾″ diameter, graduated on sterling silver ½ degrees, numbered 0-90-0; double vernier reading to 1 minute. Aluminum guard.

STANDARDS—Reinforced, with broad base; 2¾″ fine ground graduated level attached, 60 seconds.

COMPASS—Graduated on raised silver ring ½ degrees, numbered in quadrants; variation ring with vernier reading to 1 minute, moved with pinion. Vertical bar jeweled needle, 4⅛″ long. 2¼″ fine ground graduated level, 60 seconds, on plate.

LIMB—6⅛″ diameter, graduated on sterling silver to ½ degrees, numbered 0-360 in two rows right and left, with double opposite verniers reading to 1 minute.

CENTERS—Long compound with broad flanges; of very strong special composition non-friction metals, having minimum expansion and contraction, accurately fitted. Clamp and tangent. 4 nickel silver leveling screws with cups attached, and dust caps. Shifting plate.

FINISH—Black morocco, baked black enamel and bakelite lacquer.

EQUIPMENT—Plumb bob, screw driver, magnifier, adjusting pins, in mahogany box with aluminum base, lock and strap. Large split leg tripod.

SPECIFICATIONS OF PRECISE MINING AND MOUNTAIN TRANSITS

Cat. No.	Erecting Telescope			Vertical		Vernier Reading	Telescope Level		Compass Needle	Variation Vernier	Limb		Weight Instrument	Weight Tripod	Code Word
	Length	Objective	Power	Arc	Circle		Length	Value			Diameter	Graduation			
3970	9″	1¼″	20						3½″	1 min.	5⅛″	½° to 1′	10 lbs.	9½ lbs.	WICON
3971	9″	1¼″	20				4½″	40 Sec.	3½″	1 min.	5⅛″	½° to 1′	10½ lbs.	9½ lbs.	WICOP
3972	9″	1¼″	20	4⅜″		1 min.	4½″	40 Sec.	3½″	1 min.	5⅛″	½° to 1′	10¾ lbs.	9½ lbs.	WICOQ
3973	9″	1¼″	20		4⅜″	1 min.	4½″	40 Sec.	3½″	1 min.	5⅛″	½° to 1′	10¾ lbs.	9½ lbs.	WICOR
3974	9″	1¼″	20		4⅜″	1 min.	4½″	40 Sec.	3½″	1 min.	5⅛″	½° to 1′	11 lbs.	9½ lbs.	WICOS
3980	8″	1¼″	18						3 ″	1 min.	4⅝″	½° to 1′	8½ lbs.	6½ lbs.	WICOT
3981	8″	1¼″	18				4 ″	40 Sec.	3 ″	1 min.	4⅝″	½° to 1′	9 lbs.	6½ lbs.	WICOV
3982	8″	1¼″	18	4 ″		1 min.	4 ″	40 Sec.	3 ″	1 min.	4⅝″	½° to 1′	9¼ lbs.	6½ lbs.	WICOX
3983	8″	1¼″	18		4 ″	1 min.	4 ″	40 Sec.	3 ″	1 min.	4⅝″	½° to 1′	9¼ lbs.	6½ lbs.	WICOY
3984	8″	1¼″	18		4 ″	1 min.	4 ″	40 Sec.	3 ″	1 min.	4⅝″	½° to 1′	9½ lbs.	6½ lbs.	WICOZ

All Transits Listed Above Furnished with Extra Heavy Split Leg Tripod

ATTACHMENTS AND EXTRAS FOR PRECISE TRANSITS

A—Large Extension Leg Tripod instead of Large Split Leg Tripod.................Extra

B—Limb Graduations reading to 30 seconds.................

C—Limb Graduations reading to 20 seconds.................

D—Gradienter Attachment.................

E—Beaman Stadia Arc.................

F—Reflector for Telescope.................

G—Double Opposite Verniers for Vertical Circle.................

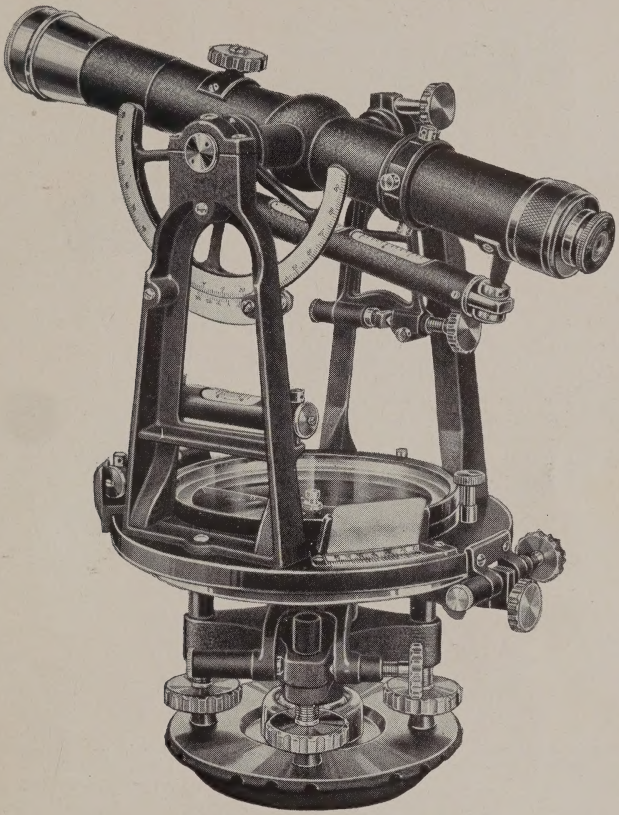
H—Solar Glass in Eyepiece Cap.................

J—Prismatic Eyepiece Attachment with Solar Glass.................

K—Improved Solar Attachment with Telescope.................

L—Auxiliary Side or Top Telescope with counterweight.................

PRECISE MINING TRANSIT



No. 3972

A compact transit for rapid work requiring extreme accuracy.

TELESCOPE—Erecting, 9″ long; objective, 1¼″; magnifying power 20 diameters; cross hairs and fixed stadia wires 1:100. Eyepiece has fine straight focusing adjustment. Clamp and tangent. Axis has 3-point straight bearing.

LEVEL—Very fine, ground and graduated, 4½″ long, 40 seconds.

VERTICAL ARC—4⅜″ diameter, graduated on sterling silver ½ degrees, numbered 0-90-0; double vernier reading to 1 minute.

STANDARDS—Reinforced, with broad base; 2⅜″ fine ground graduated level attached, 60 seconds.

COMPASS—Graduated on raised silver ring ½ degrees, numbered in quadrants; variation ring with vernier reading to 1 minute, moved with pinion. Vertical bar jeweled needle, 3½″ long. 1⅜″ fine ground graduated level, 60 seconds, on plate.

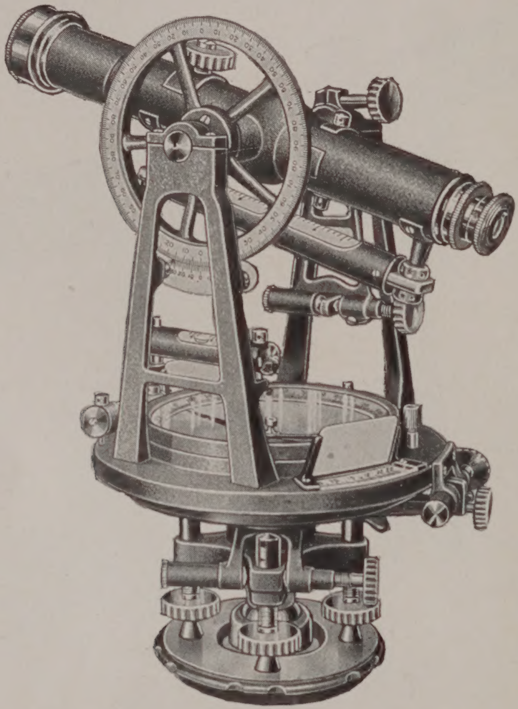
LIMB—5⅛″ diameter, graduated on sterling silver to ½ degrees, numbered 0-360 in two rows right and left, with double opposite verniers reading to 1 minute.

CENTERS—Long compound with broad flanges; of very strong special composition non-friction metals, having minimum expansion and contraction, accurately fitted. Clamp and tangent. 4 nickel silver leveling screws with cups attached, and dust caps. Shifting plate.

FINISH—Black morocco, baked black enamel and bakelite lacquer.

EQUIPMENT—Plumb bob, screw driver, magnifier, adjusting pins, in mahogany box with aluminum base, lock and strap. Medium extension leg tripod.

HIGHWAY TRANSIT



No. 3990

This instrument is especially designed for Highway Work, possessing all the features of the larger transits, while light and portable.

TELESCOPE—9¼″ long, objective 1⅛″, magnifying power 20 diameters; erecting eyepiece has spiral adjustment for focusing cross hairs. Fixed stadia wires, 1:100. Ground graduated 5″ level, 60 seconds. Clamp and tangent.

VERTICAL CIRCLE—4″ diameter, graduated on sterling silver to ½ degrees, numbered 0-90-0; double vernier reading to 1 minute.

COMPASS—3½″ needle, graduated on raised ring to ½ degrees and numbered in quadrants. Variation ring. 2 plate levels, graduated, 75 seconds.

LIMB—5⅛″ diameter, graduated on sterling silver to ½ degrees, numbered 0-360 in two rows; 2 double opposite verniers reading to 1 minute. Clamp and tangent.

CENTERS—Compound of non-friction metals, accurately fitted. Clamp and and tangent. 4 leveling screws with cups attached. Shifting plate.

FINISH—Crystallized black enamel and bakelite lacquer.

EQUIPMENT—Plumb bob, screw driver, magnifier, adjusting pins, in finished hardwood box with lock and strap; extension tripod.

WEIGHT—Instrument, 10 pounds. Tripod, 9 pounds.

No. 3990.	Complete	Each
A	Gradienter	Extra
B	Aluminum Guard for Vertical Circle..................	

1 Tripod Head
2 " Bolt
3 " " Nut
4 " " Washer
5 " Leg
6 Foot Plate
7 Ball and Socket Joint
8 Leveling Head
9 " Screws
10 " Screw Cups
11 Shifting Plate
12 Plumb Bob Suspending Cup
13 " " Chain and Hook
14 Repeating Center
15 Clamp Collar
16 Lower Clamp
17 " " Thumb Screw
18 " " Tangent Screw
19 " " Spring, Not Shown
20 " " Piston, Not Shown
21 " " Cap, Not Shown
22 Inner Center
23 Horizontal Circle
24 Vernier Plate Clamp
25 " " " Screw
26 Vernier Plate
27 " " Tangent Bracket
28 " " " Screw
29 " " " Spring
30 Tangent Spring Piston
31 " " Cap
32 Horizontal Vernier
33 Vernier Cover Glass
34 " Shade Frame
35 " " Glass
36 Compass Cover Glass
37 Needle
38 " Pivot
39 " Lifter
40 " " Screw Head
41 Front Plate Level
42 " " " Vial
43 " " " Adjusting Nuts
44 " " " Rocker
45 Standard With Adjusting Screw
46 " Adjustable Wye Bearing
47 " Cap and Screws
48 Side Level
49 " " Adjusting Screw
50 " " Fastening Screw
51 Side Level Rocker
52 " " Vial
53 Telescope Axis
54 " Barrel
55 Eye Piece Mounting
56 Spiral Groove Screw
57 Terrestrial Eye Piece
58 Eye Piece Cap
59 " " Ring
60 Wire Reticule
61 " " Adjusting Screws
62 Pinion and Washer, Not Shown
63 " Head
64 " " Screw
65 " " Saddle
66 " " " Screws
67 Object Slide
68 " Head
69 " Glass Cell
70 " Glass
71 " Slide Dust Guard
72 Sun Shade
73 Telescope Clamp
74 " " Screw
75 " " Washer
76 " Tangent Screw
77 Vertical Circle
78 " " Guard
79 " " " Screws
80 Vertical Vernier
81 " " Screws

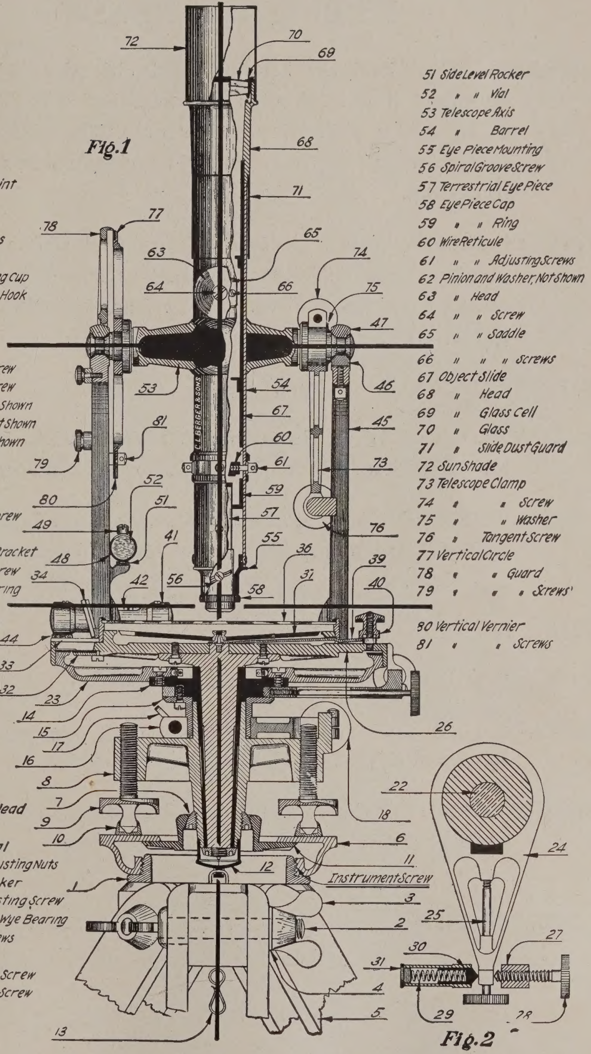


Fig.1
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C.L. BERGER & SONS
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Instrument Screw
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Fig.2

Cross Section of the Transit

The heavily drawn center line and the two parallel lines drawn at right angles to it in the above cut, indicate conditions required in a perfectly adjusted transit.

ENGINEERS' TRANSIT

TELESCOPE: 9 inches long, has powerful objective, 1¼ inches, giving increased illumination or clearness and flat field, protection to object slide; plain cross wires or stadia wires if desired. Can furnish extra side telescope or interchangeable auxiliary telescope if desired.

EYEPIECE: Is achromatic and gives a large field with plenty of light; is provided with an improved screw arrangement for the accurate focusing of cross wires. (If desired, we will furnish inverting eyepiece.)

SPIRIT LEVEL: 4½ inches long.

HORIZONTAL CIRCLE: Graduated on SOLID SILVER, 5 inches in diameter (at edge of graduation), with or without compass.

VERTICAL CIRCLE: 4½ inches in diameter, graduated on SOLID SILVER, with either edge or side graduations. Gradienter screw furnished if desired.

FINISH: Standard

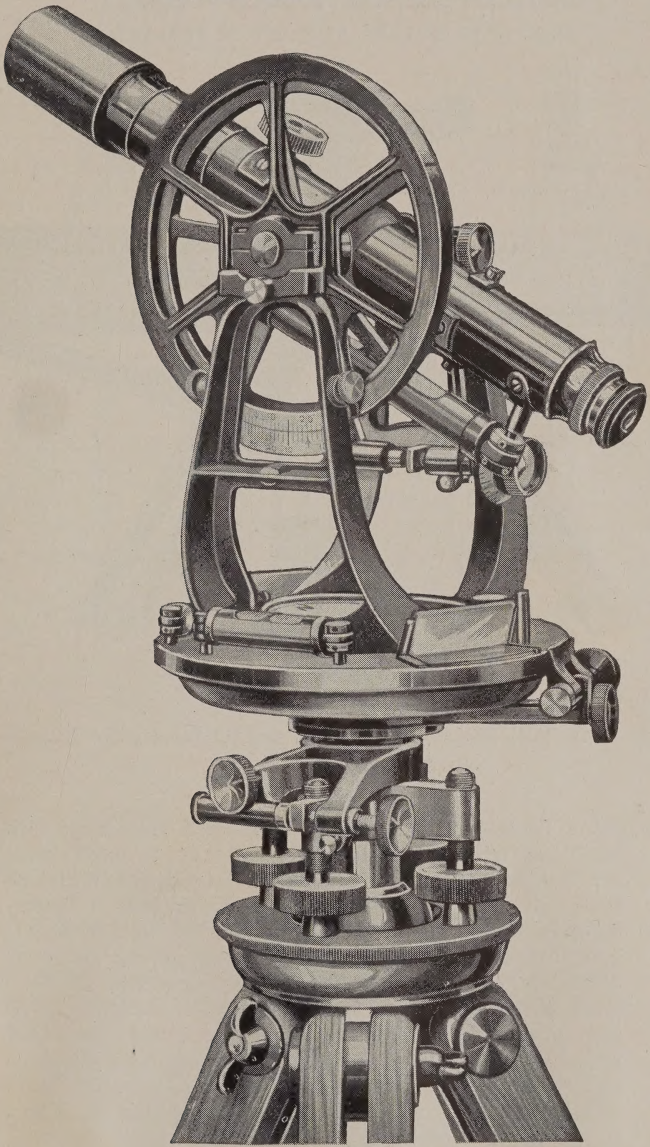
TRIPOD: Latest model improved extension Tripod.

WEIGHT: Transit 7½ pounds, Tripod 9 pounds, carrying case 4 pounds; combined shipping weight about 50 pounds.

CARRYING CASE: Mahogany finished hardwood, containing sunshade, wrench, screw driver and adjusting pins.

	Each
No. 4020. Complete..	

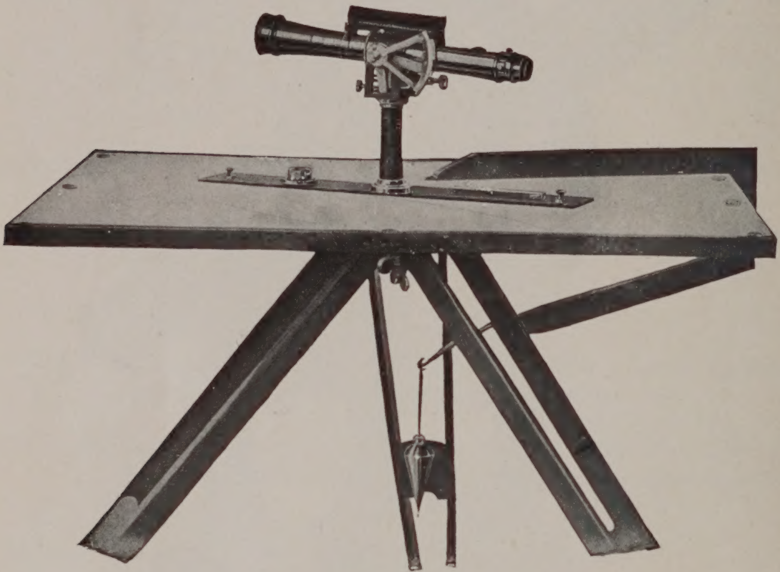
ENGINEERS' TRANSIT



No. 4020
ENGINEERS' TRANSIT

GURLEY PLANE TABLE OUTFIT

U. S. GEOLOGICAL SURVEY STANDARD



No. 4030

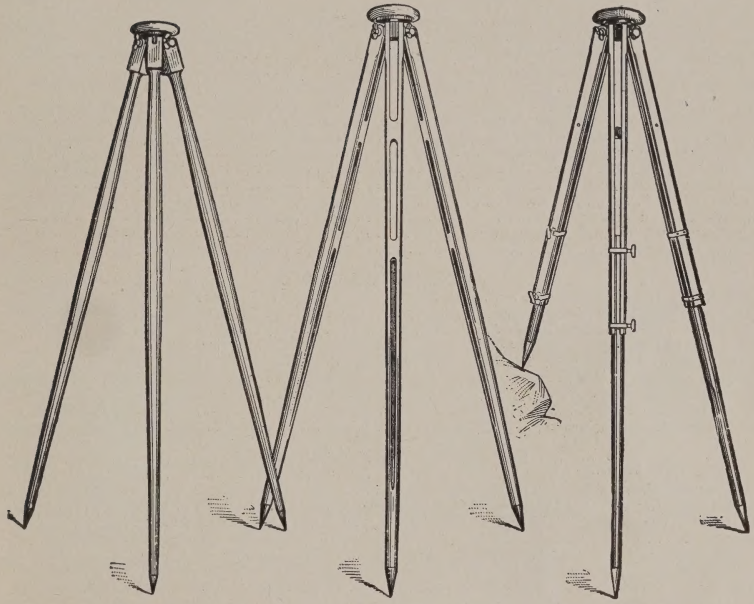
Plain Table Outfit with Johnson Movement and Alidade, with Beaman Stadia Arc.

Each

No. 4030. Plane Table Outfit, consisting of Johnson Movement with Split Leg tripod; Drawing Board, 31x24 in., with brass screw plate fitted, and with eight clamp screws and sockets for paper. Flexible Canvas Case Drawing Board; Plumbing Arm and Plummet; Alidade with 11-inch telescope, inverting eyepiece with diagonal prism, power about 22 diameters, enlarged objective, 1.38-in. aperture, platinum cross wires and stadia wires; detachable striding level; edge graduated vertical arc reading to 1 min., combined with Beaman Stadia Arc; clamp and tangent to telescope axis; blade 18x3 in., with left edge beveled; circular level, and box compass with 4-inch needle mounted on blade. In mahogany carrying case. Complete as shown above...

See Price List for Quotations

TRIPODS



No. 4050 No. 4060 No. 4070

No.		Each
No. 4050.	Solid Leg Tripod, hardwood, light, for Architects' Levels	
4060.	Split Leg Tripod, hardwood, for Levels and Transits....	
4070.	Extension Tripod, hardwood, for Levels and Transits...	

The legs of Post's Tripods are made of straight-grained hardwood, correctly proportioned and fitted with a steel-pointed shoe firmly attached to the lower end.

To overcome the difficulty of using standard Tripods in mines having shallow veins or seams, we are prepared to furnish special Extension Tripods in any height. Care should be used in ordering special Tripods to specifically state the inside diameter of the bottom plate of the leveling head and the maximum and minimum adjustment required.

PRICES FOR PARTS OF INSTRUMENTS LIABLE TO LOSS OR INJURY

FOR TRANSITS

	Each
Needle and Center Pin	
Ground Glass Level Vial, for plate or standard, and setting	
Ground Glass Level Vial, brass mounted, complete, for plate or standard	
Ground Glass Level Vial, for telescope, and setting	
Cap, for eyepiece or object glass	
Shade, for object glass	
Clamp Screws, for horizontal limb	
Tangent Screws, for leveling head	
Clamp Screw, for leveling head	
Leveling Screw, for leveling head	
Eyepiece, complete	
Object Glass, complete	
Cross Wires	
Cross Wires and Diaphragm	
Stadia Cross Wires and Diaphragm	
Adjusting Pins	

FOR Y LEVELS

Ground Glass Level Vial	according to quality
Cap, for eyepiece or object glass	
Clamp Screw, for leveling head	
Tangent Screw, for leveling head	
Leveling Screw, for leveling head	
Eyepiece, complete	
Object Glass, complete	
Cross Wires	
Cross Wires and Diaphragm	

FOR SURVEYORS' COMPASSES

Needle and Center Pin	
Ground Glass Level Vial and setting	
Ground Glass Level Vial, brass mounted, complete	
Brass Cover, for compass of our make	
Outkeeper	
Staff Mountings, brass head (without spindle)	
Staff Mountings, steel point	
Ball Spindle, fitted	
Compass Sight Vanes	
Clamp Screw, for spindle or sight vane	
Tangent Screw, for moving vernier	
Staff Mountings, complete, for pocket compass	

MISCELLANEOUS

Steel Adjusting Pins	
Glass Circle, for Compass face	
Mahogany Case, with lock, key and strap, fitted complete for Transit or Level	
Mahogany Case, with lock, key and strap, fitted complete for Compass	
Regraduating Compass Circle	
Regraduating Horizontal Limb and Verniers of Transit	
Regraduating Vertical Limb and Verniers of Transit	
Reading Microscope	
Plumb Bob, for Transit or Level	
Rubber Hood, for Transit or Level	
Chain Handles	
Chain Tallies	Per set of nine,
Clamp Screw and Band, for extension leg	
Leather Cases for Transits	

REPOLISHING INSTRUMENTS

The cost of repolishing an instrument, involving, of course, its complete readjustment, varies with the different kinds, but may be stated generally as follows:

Compass, from	
Transits, from	
Levels, from	

These prices are in addition to the cost of repairs.

No additional charge is made for bronzing or blackening an instrument when repolished.

See Price List for Quotations

EXTRAS FOR SURVEYING INSTRUMENTS

EXTRAS TO TRANSITS

Graduation on horizontal circle, on solid silver	Each,
Gradienter attachment	"
Stadia wires, fixed	"
Stadia wires, adjustable	"
Arrangement for offsetting at right angles	"
Variation plate	"
Gossamer waterproof bag, to cover transit or level in case of rain or dust	"
Bottle of fine watch oil to lubricate the centers, etc., of transit	"
Quick leveling arrangement	"
Davis' Solar Attachment, all complete	"
Leather cover over case, to be strapped to the saddle of a horse	"
Reversion Level	"
Guard for Vertical Circle	"

EXTRAS TO ENGINEERS' WYE LEVELS

Center of instrument made of steel and hardened and running in a socket of cast iron	Each,
Center of instrument made of steel and hardened	"
Stadia Wires, fixed	"
Metal-mirror with universal joint. (This is readily attachable to the instrument and facilitates the reading of the bubble on soft ground without stepping aside)	"
Extra Sunshade with smaller aperture, for use with the telescope when the sun's rays are too bright for accurate work	"
Instrument provided with three leveling screws	"
Gossamer waterproof bag, to protect the instrument in case of rain or dust	"

EXTRAS TO LIGHT MOUNTAIN TRANSIT

Extra side or top telescope	Each,
Colored glass for solar observation in eyepiece slide	"
Reflector for illuminating cross hair	"
Leather cover for case, with shoulder strap	"

EXTRAS TO MOUNTAIN AND MINING TRANSIT

Side or Top Telescope	Each,
5-inch Full Vertical Circle, instead of Arc	"
Offsetting Arrangement	"
Stadia Wires, fixed	"
Stadia Wires, adjustable	"
Variation Plate	"
Improved Solar Attachment	"
Reflector for illuminating cross hairs	"
Aluminum Guard for Full Vertical Circle	"

See Price List for Quotations

MAGNETIC POCKET COMPASSES

QUALITY COMPASSES AMERICAN MADE

No. 4480

No. 4481

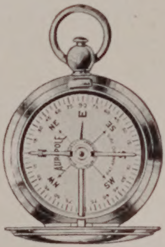
No. 4482

The quality line of Pocket Compasses is so constructed that they can be repaired easily when broken.

OPEN FACE TYPE

No. 4480. Black Bronzed Brass Case, 1¼ inch diameter............Each
4481. White Metal Case, 1¾ inch diameter.....................
4482. " " " " " " with Bar Needle......

No. 4486



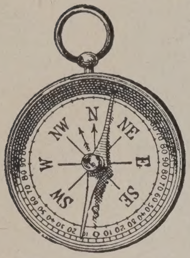
No. 4487

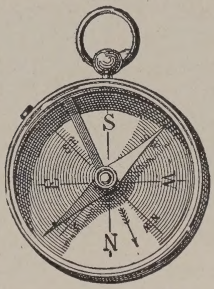
No. 4490

HUNTER STYLE CASES

No. 4486. Thin model, White Metal Case, 1¾ inch diameter........Each
4487. " " " " " " Bar Needle..........
4490. " " " (luminous dial), 1¾ inch diameter.....

MAGNETIC POCKET COMPASSES


No. 4500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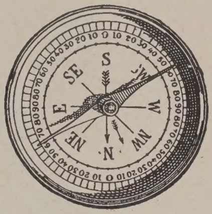
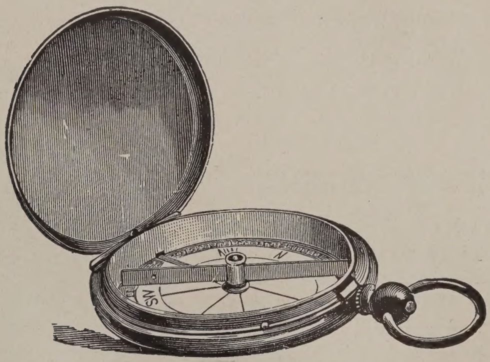

No. 4504

					Each,
No. 4500.	Pocket Compass, Brass, watch pattern, paper dial. Inches	1 3/16	1⅜	1¾	
4502.	Pocket Compass, Brass, watch pattern, metal dial, without stops to needle. Inches	1 9/16	1¾	2	
4504.	Pocket Compass, Brass, watch pattern, metal dial, stop to needle. Pull off cover	1 9/16	1¾	2	

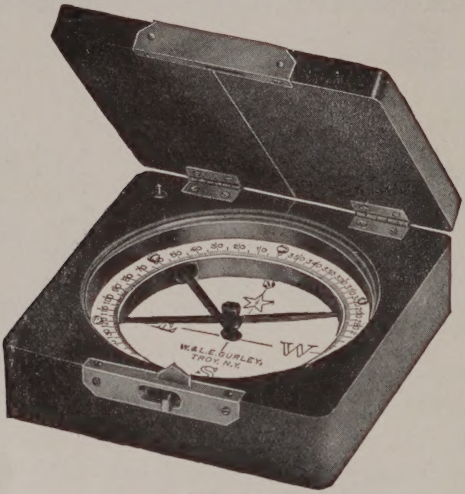

No. 4505

No. 4505. Fine Watch Pattern Compass, nickel-plated hunting case, edge-bar needle, with stop, metal dial, 1½ inches, Jewel center....Each

4506. Same as No. 4505, but 1¾ inches.......................

4508. " " " " " " " ....

POCKET MAGNETIC COMPASSES


W. & L. E. GURLEY, TROY, N.Y.
W
S

No. 4568

No. 4568. Pocket Compass, mahogany case, 3⅛″ square by 1⅛″ deep, needle circle graduated on raised ring to whole degrees and figured 0 to 90 each way. Needle 2″ long, with jeweled center and automatic stop; hinged cover with clasp. Weight, 4 oz. Each,

4570. Pocket Compass, like No. 4568 but with needle circle figured 0 to 360 ....Each,

TYCOS DIPPING NEEDLE

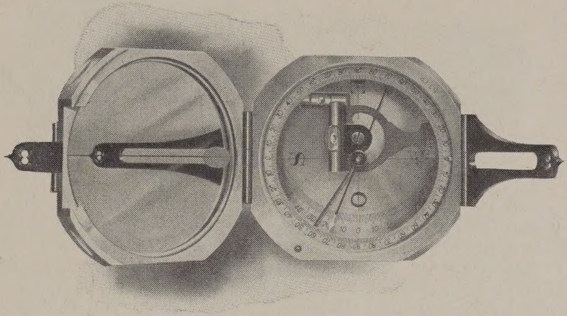
Strong, dull-black metal case with "pull-off" cover; accurately-divided white metal dial with black figures; magnetic needle poised in jeweled bearings, with stop to prevent needle from swinging when not in use, eliminates breakage. In cloth bag. Weight about 9 ounces.

No. 5152. Tycos Dipping Needle. . Each,

Tycos
Rochester, N.Y. U.S.A.
0 10 20 30 40 50 60 70 80 90 80 70 60 50 40 30 20 10 0

No. 5152

THE "BRUNTON" PATENT POCKET TRANSIT



No. 5275

A complete, accurate and reliable pocket instrument for the taking of topography and preliminary surveys of every description, either on the surface or underground; thus taking the place of a sighting compass, clinometer, prismatic compass and Abeny level, and combining them as it does in one light and handy instrument.

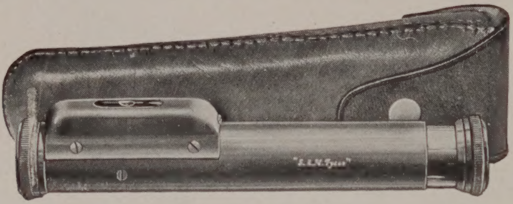
The case is made of aluminum, 2¾x2¾x1 inch. Weight of instrument, about 8 ounces.

No. 5275. Brunton Patent Pocket Transit, with directions.......Each

No. 5275A. Ball and socket tripod head...
5275B. Tubular extension tripod.....
5275C. Leather case...............
5275D. Ditto with belt loop.........
5275E. Ditto with sling strap........
5275F. Ditto for instrument, tripod head and tripod............

NOTE—Unless otherwise ordered instruments will be supplied with compass circles numbered 0 to 360 clockwise, but circles numbered in quadrants (0 to 90 each way) and 0 to 360 counter-clockwise, will be furnished without extra charge if specified.

HAND LEVELS

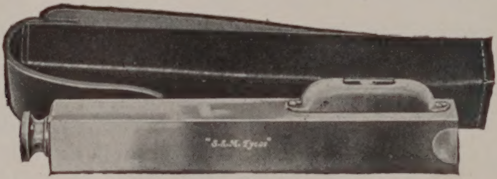


This instrument consists of a tube about 6 inches long, having attached at one end a saddle piece containing a glass spirit level, which being transparent and fixed over an opening in the tube, carries the reflection of the air-bubble upon the surface of a polished reflector. The further end of the tube has a sliding eyepiece in which is fixed the half circle of a magnifying lens. The level requires no adjustment, can be carried in the pocket and is always ready for use.

No. 5288. **LOCKE HAND LEVEL.** Brass, nickel-plated, 5 inches, in sewed leather pouch . . . . .Each,

5290. **LOCKE HAND LEVEL.** Brass, black finish, 5 inches, in sewed leather pouch . . . . .Each,

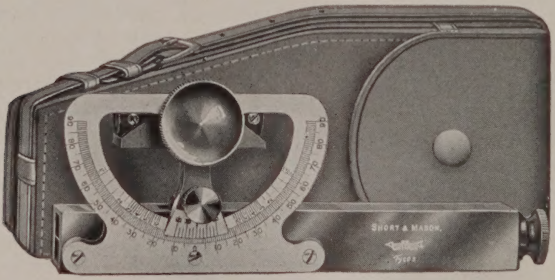
5292. **LOCKE HAND LEVEL.** Brass, black finish, **without magnifier,** in leather pouch. . . . . .Each,



No. 5293

No. 5293. **HAND LEVEL.** Brass, black finish, 5 inches, in leather covered case . . . . Each,

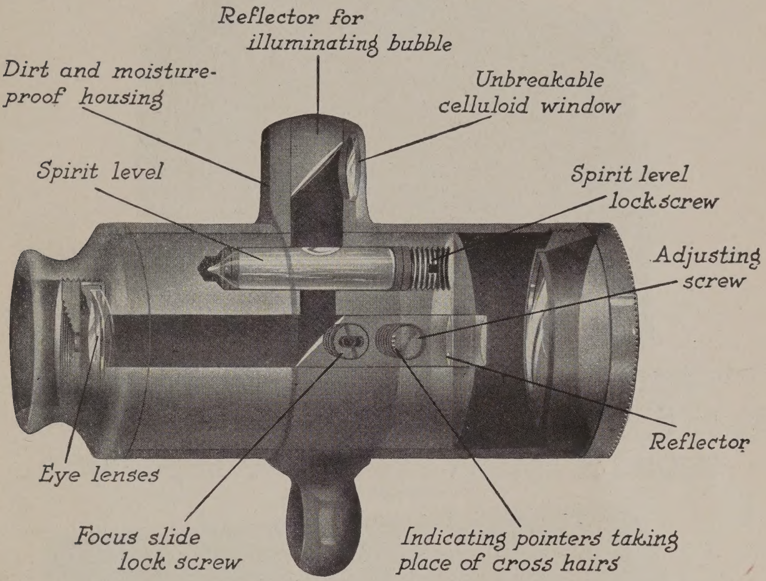
ABNEY'S HAND LEVEL



No. 5295

No. 5295. Abney's Reflecting Level or Pocket Altimeter, square bronzed sighting tube, 5 inches, with vertical arc, 1 inch, graduated to 90 degrees, in each direction to single degrees, with folding vernier reading to 5 minutes. Scale of grades from 1:1 to 1:10. Spirit level, in leather case. . . . . .Each,

TRU-LINE-SCOPE


Reflector for illuminating bubble
Dirt and moisture-proof housing
Unbreakable celluloid window
Spirit level
Spirit level lock screw
Adjusting screw
Reflector
Eye lenses
Focus slide lock screw
Indicating pointers taking place of cross hairs

This Instrument is built to fill the engineer's need of a hand level that combines greater range and accuracy with ease of manipulation and dependable, unbreakable construction.

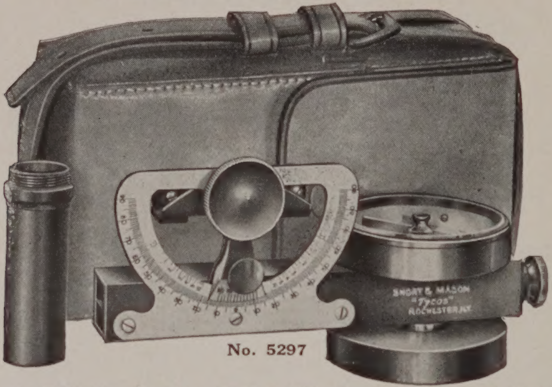
No ordinary accident can harm the TRU-LINE-SCOPE. The eye lens, spirit level, indicating pointers and reflectors are completely enclosed in a solid aluminum body. The spirit level is cushioned between cork shock absorbers. The indicating pointers are rigidly set and protected so nothing can come near them. The reflector is brass with a polished nickel reflecting face, unbreakable. The large object lens, an inch in diameter, is burnished into an exceptionally deep ring mounting. Strength has been a vital consideration at every point. It is break-proof, damp-proof and dust-proof.

To attain its full measure of effectiveness a hand level must have telescopic power. At the same time an impractical degree of sensitiveness must be guarded against or its effectiveness will be decreased instead of increased. The magnifying power of about three and one-half diameters of the TRU-LINE-SCOPE, together with the unique arrangement of the indicating pointers and bubble and a carefully balanced lens system gives clear vision at one hundred and fifty feet and a very practical degree of accuracy at seventy-five feet.

The bubble and indicating pointers are clearly defined. There is no eye-strain when using the TRU-LINE-SCOPE. The additional reflector for illuminating the bubble insures proper lighting, a frosted surface on the vial itself prevents glare. The bubble stands out sharply in a soft field. The indicating ponters are in Direct Focus. This feature results in one of the truly remarkable optical properties of the instrument. It allows the pointers to be brought directly across the image of the rod as sharp shadows, clearly defined yet transparent. This makes the reading unmistakable.

Stadia Wires, for the first time, have been incorporated in an instrument of this size and price. They are effective in many classes of work and an invaluable adjunct to the all-around usefulness of the TRU-LINE-SCOPE.
No. 5285. TRU-LINE-SCOPE, in leather case, weight 6 ounces........Each

ABNEY'S HAND LEVEL



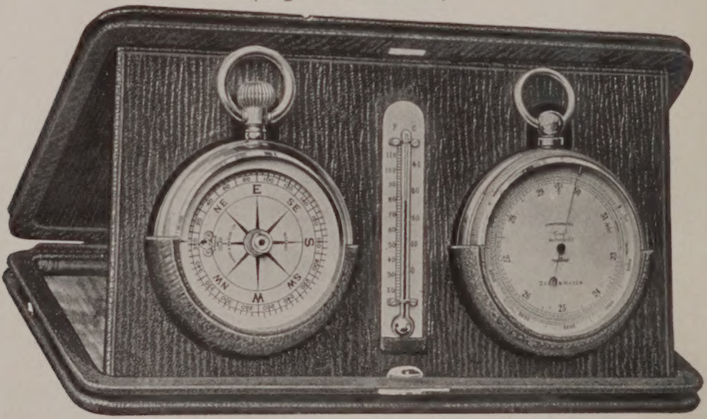
No. 5297

No. 5297. Abney's Reflecting Level or Pocket Altimeter, 5 inches, with divided arc to show angles and with bar needle compass, and socket for Jacob staff, in hand-sewed case..Each,

This instrument will be found very useful for all operations where inclination of surface and angular distance is needed.

SHORT & MASON TYCOS TRAVELING SETS

(English Manufacture)



No. 5298
(About Two-Thirds Actual Size)

These sets include three instruments indispensable to the traveler, the tourist, the hunter; in fact, to all who spend any time in the great out-of-doors.

Each,

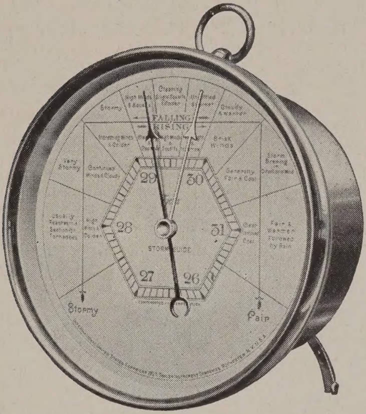
No. 5298. S. & M. TYCOS "Livingstone" Traveling Set (finest quality); comprises a No. 5416 (page 341) 1¾-in. best-quality, watch-size, aneroid barometer, compensated for temperature and dial graduated to 8,000 feet altitude in 50-feet divisions; a full-size pocket magnetic compass and an ivory-scale thermometer. All in best-quality blue soft skiver carrying case, with easel back, as illustrated..

No. 5299. Same as No. 5298 but with Aneroid Barometer reading to 16,000 feet....

5480. TYCOS "Thermograph" (Recording Thermometer), gray-enameled metal case, 10 inches long, 6 inches high, 4¾ inches deep; complete with year's supply of charts (0° to 100° F.); charts (minus 20° to plus 30° Cent.); charts (20° to 120° F.), or charts (minus 10° to plus 90° F.); bottle of ink and full instructions. Weight about 8 pounds....................

TYCOS BRASS-CASE "STORMOGUIDES"

(American Manufacture)



No. 5400

The Simplest Form of Barometer to Read

Barometers are instruments essential in weather forecasting. For years they have been made with weather words, "Fair," "Change" and "Stormy" at definite positions on the dial, and for years to come many will be made this way. The TYCOS "Stormoguide" now offered you, is much simpler to read, however, since complete forecasts are plainly shown on the dial.

The weather forecasts on the dial of the TYCOS "Stormoguide" are based on barometer indications at sea level. To furnish correct readings at an altitude above sea level, a barometer must be adjusted to allow for the effect of the altitude on the reading of the instrument. The "Stormoguide" provides for this by having an altitude plate fitted in its back. To make the adjustment it is necessary simply to revolve the back plate with the fingers until the arrow engraved in the back of the case points to the proper altitude indications for the location in which the instrument is to be used.

Each

No. 5400. **TYCOS Brass-Case "Stormoguide" (ordinary grade). Ordinary-grade movement (not compensated); blue-bronzed, round, brass case with ring at top for hanging; five-inch, white-enameled card dial; for altitudes 0 to 3,500 feet . . . .**

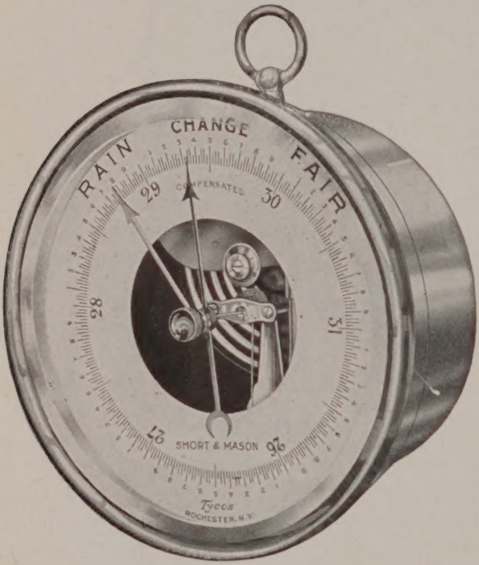
5402. **TYCOS Brass-Case "Stormoguide" (best grade); movement compensated for temperature changes. Antique-finish, round, brass case with ring at top for hanging, and feet which fold into case when not in use; 5-inch engraved silvered metal dial; for altitudes 0 to 3,500 feet. . . . .**

TYCOS SPECIAL BRASS-CASE ANEROID BAROMETERS

COMPENSATED FOR TEMPERATURE

(American Manufacture)

As Supplied to U. S. Navy, U. S. Weather Bureau,
U. S. Bureau of Plant Industry, etc.

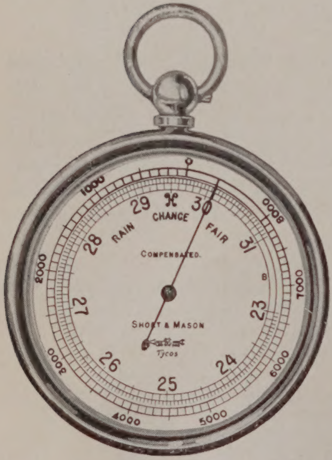

CHANGE
RAIN
FAIR
29
30
28
31
27
26
COMPENSATED
SHORT & MASON
Tycos
ROCHESTER, N.Y.

No. 5410

To be absolutely accurate, a barometer must of necessity be compensated for temperature. Some years ago we developed the No. 5410 type of Aneroid Barometer and it has been supplied since to the U. S. Navy and the U. S. Weather Bureau, besides many scientific and educational institutions throughout the country.

As at present constructed, the movement is practically non-corrosive, steel parts having been replaced, where practical, with either nickel-silver or phosphor-bronze.

No. 5410. TYCOS Special Brass-Case Aneroid Barometer, lacquered brass case, 5 inches in diameter;open-center silvered-metal dial, divided with great accuracy. The movement is extra-grade, compensated for temperature changes, thus insuring at all times accurate readings of barometric pressure. Packed in cardboard box. Weight, 24 ounces..............Each,


1000
2000
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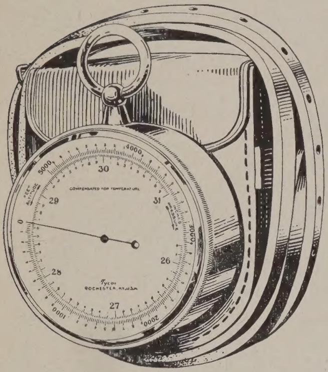
23
CHANGE
RAIN
FAIR
COMPENSATED
SHORT & MASON
Tycos

No. 5416

No. 5416. S. & M. TYCOS Aneroid, Barometer, gold-plated case; 1¾ inches in diameter; silvered-metal dial; altitude scale to 8,000 feet in 50-feet divisions; compensated for temperature; in soft leather case ....Each,

5418. Same as No. 5416, except reading to 16,000 feet in 100-feet divisions....Each,

THE TYCOS ALTITUDE BAROMETER



No. 5420

The TYCOS Altitude Barometer possesses a distinct, exclusive and valuable advantage over all other instruments of this character.

The graduations on the altitude scales of all barometers in the past have been in unequal divisions, which necessitates their being used in a certain way only. This means that a subtractive sum has to be worked out in order to get an accurate reading of elevation. Such altitude barometers are arranged either with their altitude scales engraved on their barometric pressure plate, or with the altitude scales made to revolve. Whichever way the instrument is made, it is possible to use it correctly in only one way, and that is to keep the "O" on the altitude scale at the 31 point on the barometric pressure dial. This is because the altitude scale is unequally divided.

With the new TYCOS Altitude Barometer, the scale is divided equally and revolves around the barometric pressure dial. This means that the zero on the altitude scale can always be set to the point of the hand, without error, so that in traveling, the hand will always point to the true elevation of the instrument from its starting point, without any deduction or addition.

This feature is to be found only on the new TYCOS Altitude Barometer and is considered to be the greatest advance in altitude barometer making in many years.

As a weather forecaster, the TYCOS Altitude Barometer is extremely interesting.

The TYCOS Altitude Barometer is not only indispensable to surveyors, but it is a refined and interesting companion to the traveler and motorist.

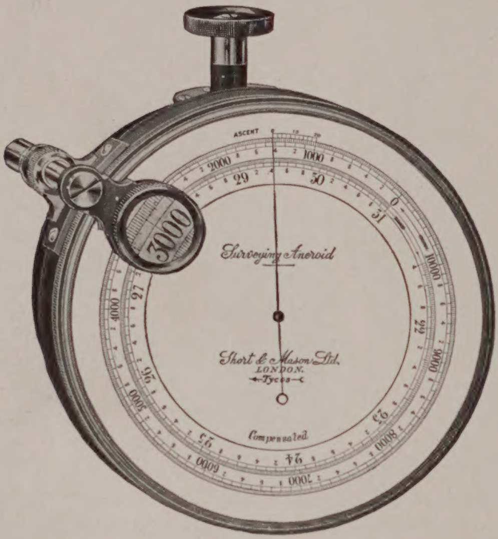
The case of the instrument is of grained aluminum, nicely finished; the front is covered with a beveled glass. It measures but 2¾ inches in diameter and is only a trifle more than 1¼ inches deep. It is furnished in a hand-stitched leather case with shoulder strap and belt loop. Complete weight, nine ounces.

		Each
No. 5420.	TYCOS Altitude Barometer, Altitude Scale to 5,000 feet, in 20-foot divisions	
5422.	TYCOS Altitude Barometer, Altitude Scale to 10,000 feet, in 50-foot divisions	
5424.	TYCOS Altitude Barometer, Altitude Scale to 16,000 feet, in 50-foot divisions	

SHORT & MASON TYCOS SPECIAL SURVEYING

ANEROID BAROMETERS

(English Manufacture)



These instruments are designed especially for readily ascertaining slight variations of gradients, levels, etc. For approximate surveys and levelings for roads, railways, canals, water courses and mines they are invaluable, as their readings are so easily and rapidly taken. They are in great demand by geologists in the oil regions, for checking up slight differences in elevation.

The action has been arranged to give accurate readings on a regular scale of altitudes. The barometer scale of inches has been made progressive to afford the correct relative readings with the scale of altitudes, but this arrangement in no way interferes with their use as an ordinary barometer.

"Under many conditions a barometric survey is preferable to a plane-table survey."

Each

No. 5430. S. & M. TYCOS Surveying Aneroid Barometer, aluminum case three inches in diameter; silvered-metal dial with vernier scale moved by rackwork motion; reading lens arranged to traverse the entire circle; movement compensated for temperature; altitude scale 6,000 feet, reading by vernier to two feet of elevation; in solid-leather sling carrying case; weight about 38 ounces..........

5432. Same as No. 5430, except for readings to 3,000 feet only and reading by vernier to single feet of elevation..........

5434. Same as No. 5430, except 5 inches in diameter and reading by vernier to single feet of elevation; weight 49½ ounces..........

5436. Same as No. 5434, except for readings to 3,000 feet only and reading by vernier to single feet of elevation..........

5438. Same as No. 5434, except for readings to 10,000 feet; vernier reading to two feet of elevation..........

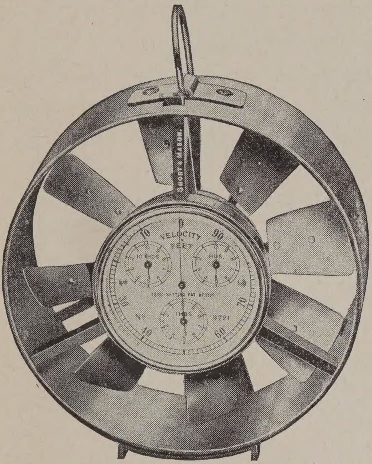
5440. Same as No. 5434, except for readings to 16,000 feet; vernier reading to two feet of elevation..........

TYCOS JEWELED ZERO-SETTING ANEMOMETERS

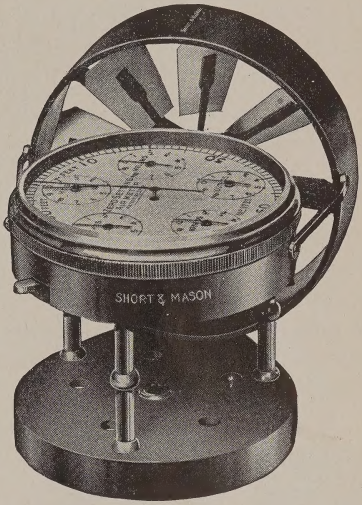
BIRAM'S PATTERN

(American Manufacture)

As Supplied to U. S. Department of Agriculture, U. S. Bureau of Mines, U. S. Naval Academy, Etc.



No. 5450



No. 5454

For registering the velocity of currents of air in mines, tunnels, flues of furnaces, etc., by means of a light fan, the revolutions of which are recorded on dials in the center of the instrument.

Each

No. 5450. **TYCOS** Biram's Anemometer........................
Jeweled movement, fitted with our patented, instantaneous zero-setting arrangement; 4-inch diameter; 4 dials reading to 100,000 feet; in sole-leather carrying case. Weight, 16 ounces. Each instrument is tested and a chart of corrections furnished for velocities from 200 to 3,000 feet per minute. Not guaranteed to give correct results if used in temperatures exceeding 300° F.

5452. Extra Sole-Leather Cases for No. 5450................

5454. **S. & M. TYCOS** Airmeter...........................
Jeweled movement; zero setting; four dials reading to 100,000 feet; 2½-inch dial; stands 3 inches high; weight, 8½ ounces; in sole-leather carrying case.

5456. Same as No. 5454, except with six dials reading to 10,000,000 feet...................................

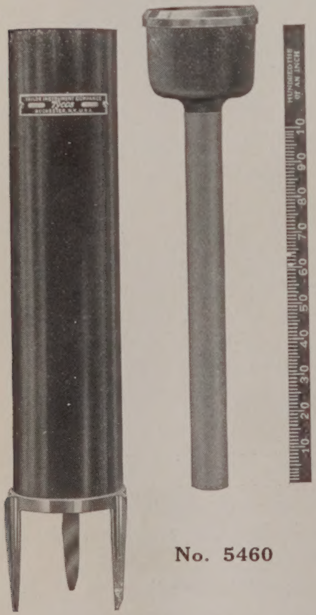
DIRECTIONS FOR USE OF

TYCOS JEWELED ZERO-SETTING ANEMOMETERS

The TYCOS Anemometer should be placed in the air channel, all hands having been set at zero, by the instantaneous method, a special feature of this instrument. The stop lever then can be moved and the instrument will start registering. At the end of one or five minutes, or any other period fixed for the test, move the stop lever and note the reading.

The reading will be the number of **linear** feet of air that have passed the instrument during the period of observation. To obtain the number of **cubic** feet of air that have passed the Anemometer, the number of linear feet should be multiplied by the area of the channel.

In making tests it is desirable to place the Anemometer in several different positions, always with the dial facing in the **same direction** as the current, i.e., so that the air passes through the instrument from back to front, and not from front to back. By adding the various readings obtained and dividing by the number of tests, you get a mean reading.



No. 5460

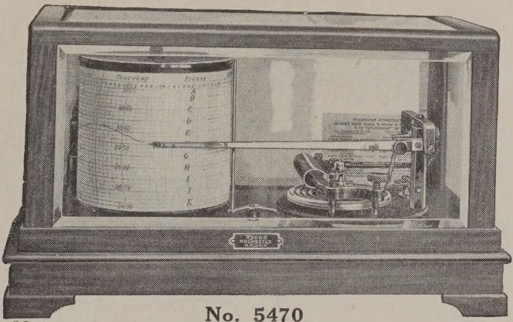
No. 5460. Tycos Rain Gauge...Each,

Blue-bronzed metal cylinder, 13½ inches high, with brass rim three inches in diameter inside; three pointed feet, three inches long, which hold the gauge upright when forced into the ground. Care in manufacture makes this a most satisfactory instrument. Has two graduated measuring sticks to show from .01 to 1.0 inch of rainfall. Packed in special felt-lined shipping container.

TYCOS "CYCLO-STORMOGRAPH"

AUTOMATIC WEATHER FORECASTER

(American Manufacture)



No. 5470

The TYCOS "Cyclo-Stormograph" writes tomorrow's weather in ink on a simplified chart—a child can read it. This information as to what weather to expect, is of interest to everyone and of real monetary value to many.

Largely used by bankers, yachtsmen, farmers, merchants and others whose interests need safeguarding by advance weather information.

Displayed in a store window, the public will consult it, the store becomes a local weather bureau and much free newspaper advertising results from its forecasts.

	Each
No. 5470. **TYCOS** "Cyclo-Stormograph" (Recording Barometer), glass-covered mahogany case, size 12½ inches by 7¼ inches. Complete with forecast cards, year's supply of charts, bottle of ink, etc...........................	

TYCOS "THERMOGRAPH"

(American Manufacture)

In use by U. S. Department of Agriculture, Canadian Government, the leading observatories and many educational institutions.

No. 5480

The TYCOS "Thermograph" (Recording Thermometer) is arranged to give on a chart a continuous seven-day ink record of temperature.

This chart is divided into days and two-hour sub-divisions of each day. Horizontally, the dividing lines are in degrees of temperature.

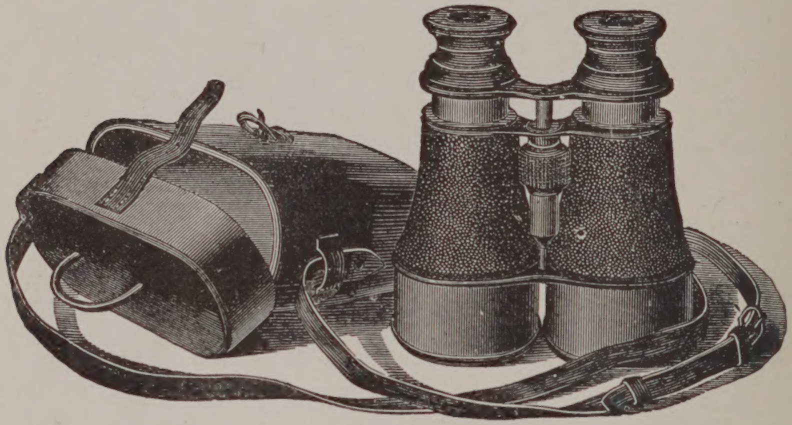
An arm carrying the recording pen is connected directly with a bi-metallic coil, which changes as the temperature rises or falls. This causes the arm, with the recording pen attached, to move vertically over the chart, thus making the record.

FIELD OR MARINE GLASSES

"Lemaire" (Paris) Brand

U. S. Signal Day and Night Glasses, adopted by the U. S. Government.

Arched Cross Bars with Sun Shades



No. 5500

THE STANDARD

These glasses are supplied with lenses which have never been equaled in definition, so constructed to meet the requirements of long range purposes, the frame work being strong and not liable to get out of adjustment.

No. 5500. Field or Marine Glasses, black Morocco, stitched, oxidized cross bars, slides and sun shades, sole leather case, with strap.

Lignes	21	24	26
Each,			

5510. Field or Marine Glasses, 12 lenses, black Morocco, oxidized cross bars, slides and sun shades, same as No. 5500, the best glasses in the market; 26 lignes, sole leather case, with strap. . . . . Each,

5515. Field or Marine Glasses, bright aluminum, metal body, Russia leather covered, with sun shades, sole leather case, with strap.

Lignes	19	21	24	26
Each,				

STEREO BINOCULARS

HIGHEST QUALITY

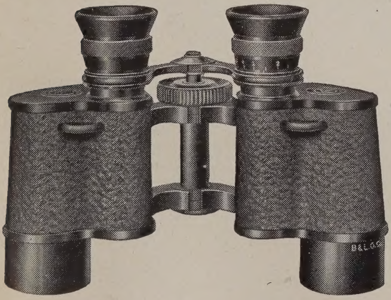
BAUSCH & LOMB TEN POWER BINOCULARS

10×, 44mm, Stereo Binocular

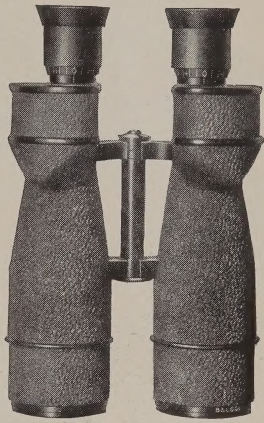
The Bausch & Lomb 10×, 45mm, Stereo Binocular is a wonderfully effective combination of high power and brilliant illumination. Its larger objectives and longer focus necessitate an instrument of greater dimensions, but the amount is so shaped that it is conveniently held.

The new Bausch & Lomb 10×, 30mm, binocular combines maximum power with extreme compactness. It is like the 30mm, six and eight power, glasses in mount.

No.		Price
5520.	**Bausch & Lomb Stereo Binocular,** 10×, 30mm, wt. 26 oz...........	
5522.	**Bausch & Lomb Stereo Binocular,** 10×, 45mm, wt. 36 oz.............	



No. 5550. B&L 6×, 25mm, wt. 22½ oz.
5551. B&L 6×, 30mm, wt. 24 2/3 oz.
5553. B&L 8×, 25mm, wt. 22 oz.
5554. B&L 8×, 30mm, wt. 24½ oz.



BAUSCH & LOMB SIX & EIGHT BINOCULARS

25mm Stereo Binocular, 6× and 8×

A large field of view and power sufficient for the study of animals and birds, races and similiar uses make the Bausch & Lomb Six Power Stereo Prism Binocular among the most useful models. Good illumination is secured without exceptionally large objectives.

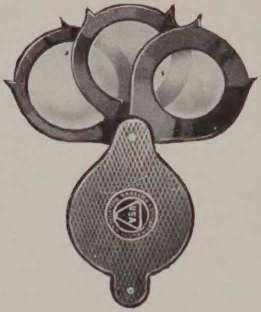
Two models are offered—the 6×, 25 mm, binocular with enough light-gathering power for ordinary use; and the 6× 30 mm, binocular, the light-gathering capacity of which makes it ideal as a "night glass." The latter is a favorite army model, and is best for use in shaded places.

Two eight power binoculars are offered,—with 25 and 30 mm objectives. The larger objectives insure more satisfactory illumination under any reasonable light conditions.

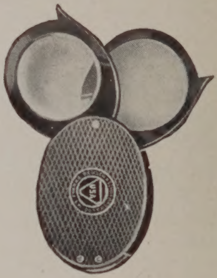
FOLDING POCKET MAGNIFIERS

Vulcanite (Rubber) Mounting

Single Lens

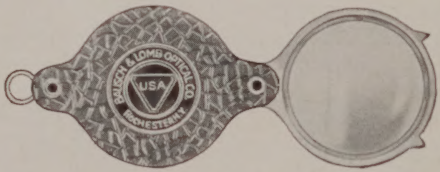


Triple Lens



Double Lens

No.	Lens	Size	Diameter	
No. 5574.	Single Lens	⅞	inch diameter	Each,
5575.	" "	1	" "	
5576.	" "	1¼	" "	
5580.	" "	1½	" "	
5584.	Double Lens	⅝- ⅞	" "	
5585.	" "	⅞-1	" "	
5586.	" "	1⅛-1¼	" "	
5590.	" "	1¼-1½	" "	
5593.	Triple Lens	½-⅝-¾	" "	



No. 5600

No.	Lens	Size	Diameter	
No. 5600.	Single Lens	20	mm. diameter	Each,
5601.	" "	25	" "	
5602.	" "	30	" "	
5605.	Double "	20-20	" "	
5606.	" "	25-25	" "	
5607.	" "	30-30	" "	

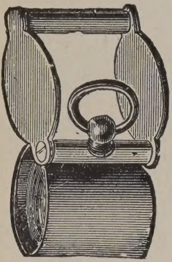
FRENCH POCKET MAGNIFIERS

METAL MOUNTING NICKEL-PLATED

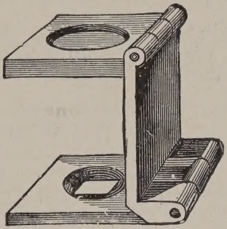
No.	Lens	Size	Diameter	
No. 5595.	Single Lens	1	inch diameter	Each,
5596.	Double "	1	" "	
5597.	Triple "	1	" "	

MAGNIFYING GLASSES

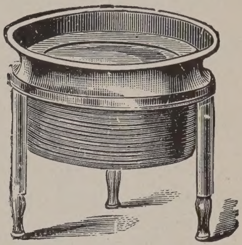
FINEST QUALITY



No. 5700



No. 5710



No. 5715

No. 5700. Coddington Lens, metal folding frame, nickel-plated, ½-inch diameter . . . . .Each,

5702. Coddington Lens, metal folding frame, nickel-plated, 1-inch diameter . . . .

5704. Coddington Lens, metal folding frame, nickel-plated, 1⅜-inch diameter . . . .

5709. Thread Counter, ¼-inch field . . . .

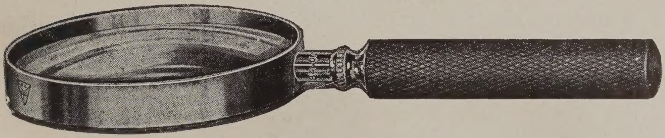
5710. Thread Counter, ½-inch field 58

5711. Thread Counter, 1-inch field . . . .

5715. Magnifier, on 3 legs, brass, screw adjustment, 1″ diam.

READING AND REDUCING GLASSES

FINEST QUALITY



No. 5720

No. 5720. Inches . . . . . . 1½ 2 2½ 3 3½ 4 4½ 5 Each,

5721. Reducing Glasses.
Inches 2 3

These Reading and Reducing Glasses are of superior magnifying power, and mounted in round nickel-plated frame, with ebony handles.

SCIENTIFIC BOOKS

No. 8000. Arthur, Wm.—**New Building Estimator.** A modern working guide for all who figure the cost of building construction, either in detail or approximately. 5x7 in., 744 pages illustrated. Flexible.

No. 8002. Baker, D. O.—**Engineers' Surveying Instruments.** Their construction, adjustment and use. Second Edition, revised and greatly enlarged. 5x7½ in., 391 pages, 86 illustrations. Cloth.

No. 8004. Baker, L. O.—**A Treatise on Masonry Construction.** Complete in one volume of about 500 pages, with 125 illustrations and eight folding plates. Ninth Edition. 8 vo. Cloth.

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No. 8014.—Burt, W. A.—**A Key to the Solar Compass.** A complete description of the Solar Compass, together with full rules for its use. Eighth Edition, 5x7 in., 118 pages. Leather.

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SCIENTIFIC BOOKS—Continued

No. 8026. Frye, A. I.—**Civil Engineers' Pocket Book.** A comprehensive treatment of Civil Engineering in seventy sections. A reference book for engineers, contractors and students. Second Edition, corrected. 4¾x7 in., 1,653 pages, 1,200 illustrations, 620 tables. Fabrikoid.

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No. 8030. Goodell, J. M.—**The Location, Construction and Maintenance of Roads.** This book is the product of co-operation of over fifty leading American highway engineers. 6x9 in., 220 pages. Cloth.

No. 8032. Hall, John L.—**Table of Squares.** Contains the true square of every foot, inch and $\frac{1}{16}$ of an inch, between $\frac{1}{16}$ of an inch and 100 feet; flexible morocco; 3½x5¾ in. Gilt edges.

No. 8034. Halsey, F. A.—**The Use of the Slide Rule.** Fourth Edition, revised and enlarged. 3¾x6 in., 96 pages, 18 illustrations, 7 folding plates. Boards.

No. 8036. Haswell, C. H.—**Engineers' and Mechanics Pocket Book.** Sixty-ninth Edition, revised and enlarged. 982 pages, 12 mo. Leather.

No. 8038. Inskip's—**Tables of Five-Place Squares and Logarithms of Feet, Inches and 32ds of Inches from 0 to 100 Feet. Logarithmic Functions, Natural Sines and Co-Sines.** 280 pages. Flexible leather.

No. 8040. Johnson, J. B.—**The Theory and Practice of Surveying.** Designed for the use of surveyors and engineers generally, but especially for the use of students in engineering. Illustrated by upwards of 150 engravings with folded maps, tables, etc. Sixteenth Edition, revised, 8 vo. Cloth.

No. 8042. Kent, Wm.—**Mechanical Engineers' Pocket Book.** A reference book of rules, data, tables and formulas for the use of engineers, mechanics and students. Seventh Edition, revised. 16 mo. Morocco.

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No. 8046. Kidder, F. E.—**Building Construction and Superintendence.** Part I, Mason's Work. Fifth Edition. 250 illustrations. Cloth. Part II, Carpenter's Work. Fourth Edition. 544 pages, 524 illustrations. Cloth. Part III, Roof Trusses. 206 figures and diagrams, 297 pages, 8 vo. Cloth.

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